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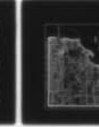
DEPARTMENT OF THE AIR FORCE WASHINGTON D C
PROPOSED CLOSURE OF KINCHELOE AIR FORCE BASE, MICHIGAN. (U)
1976

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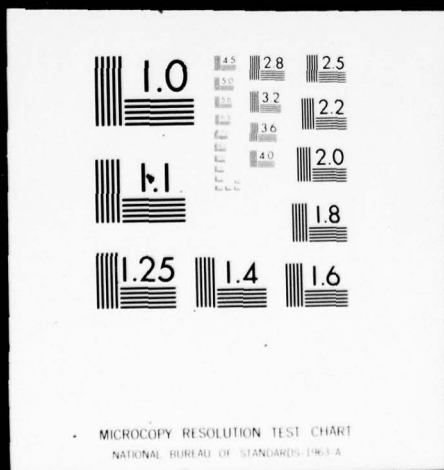
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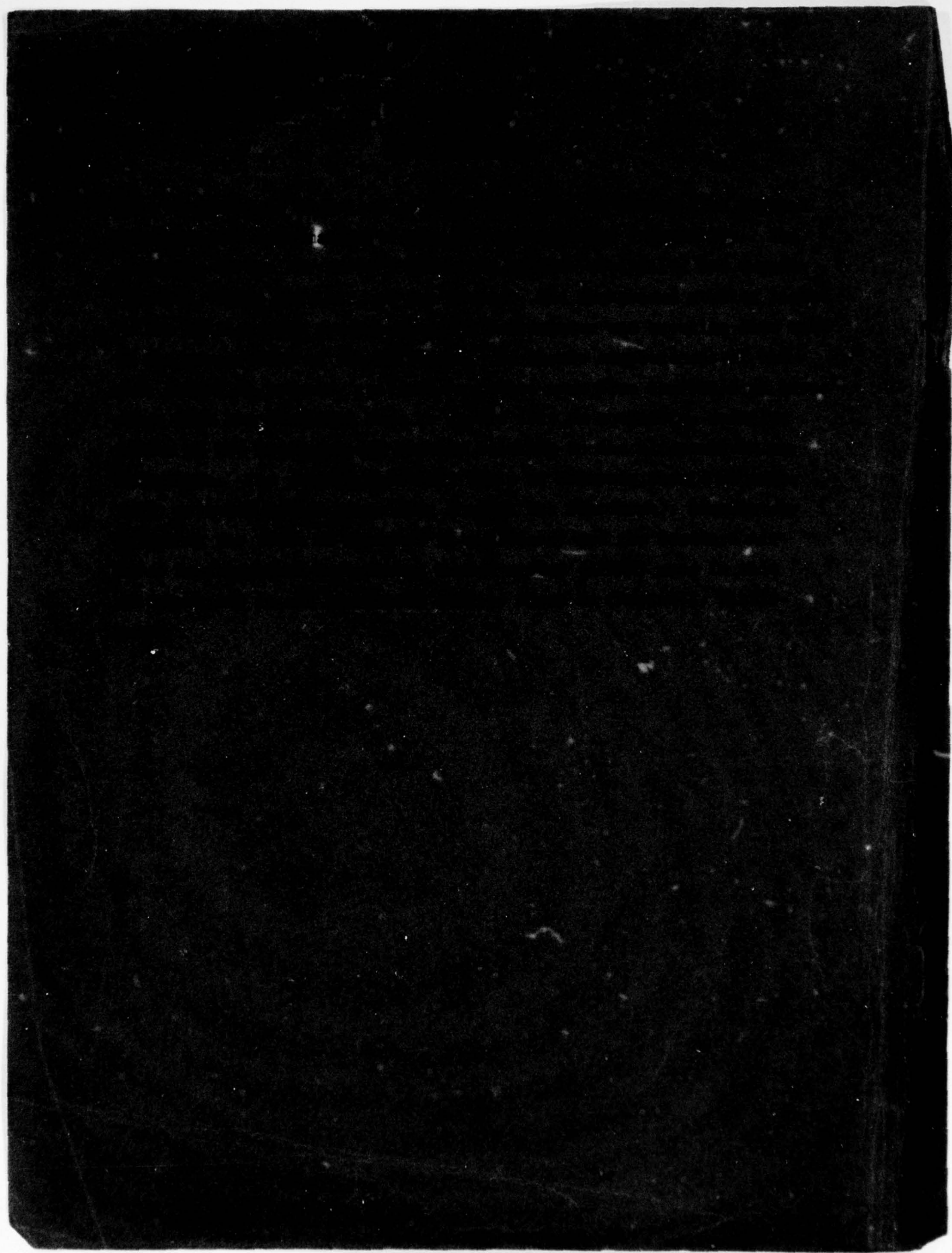
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9. FINAL ENVIRONMENTAL IMPACT STATEMENT.

for the

6. PROPOSED CLOSURE OF
KINCHELOE AIR FORCE BASE,
MICHIGAN.

DEPARTMENT OF THE AIR FORCE

11 1976

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SUMMARY SHEET
FINAL ENVIRONMENTAL IMPACT STATEMENT

PROPOSED CLOSURE OF
KINCHELOE AIR FORCE BASE
MICHIGAN
ADMINISTRATIVE ACTION

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CONTACT FOR INQUIRIES

This statement was prepared by the United States Air Force. Any inquiries concerning this proposed action should be addressed to the Special Assistant for Environmental Quality, Office of the Secretary of the Air Force (SAF/ILE), Washington, D.C. 20330.

DESCRIPTION SUMMARY

The imperative need to manage Air Force resources with less, while maintaining a credible combat capability led to a renewed review of all base operating functions, activities, and installations. As a result of this review, the Air Force determined that the following candidate action would significantly reduce an existing excess in basing capacity and, in turn, would decrease the number of base operating support personnel required with minimum impact on our combat capability.

The proposed action is to: inactivate the 449th Bombardment Wing and its supporting organizations, close Kincheloe AFB, Michigan by the end of Fiscal Year 1977 and declare the base excess to Air Force requirements. On the average, the 16 B-52Hs and 16 KC-135 aircraft generate 1,500 takeoffs, landings and low approaches monthly. These aircraft would be redistributed as follows: 14 B-52Hs to Ellsworth AFB,

South Dakota; 2 B-52Hs to K.I. Sawyer AFB, Michigan; and 16 KC-135s to the Air Reserve Forces.

The personnel impact of this proposal would be the elimination of approximately 3,900 personnel (3,100 military, 800 civilians) at Kincheloe AFB. This personnel figure represents those assigned to Kincheloe AFB as of March 31, 1976 and includes in-service, Army/Air Force Exchange Service, and Non-Appropriated Fund personnel. This actual assigned figure was used to develop a "worst case" socioeconomic impact study rather than using an end fiscal year 1977 projection that, due to normal programmed reductions, would be approximately 450 personnel less. It should be noted that the 800 civilian personnel includes part-time employees. For purposes of the socioeconomic impact, the civilian total equates to about 700 Full-Time Equivalent (FTE) personnel.

The relocation of aircraft would result in a net increase of approx. 500 & 140 military authorizations at Ellsworth and K.I. Sawyer AFBs, respectively. A caretaker force with appropriate personnel would be retained at Kincheloe AFB after the relocation of the primary mission. Initially, the caretaker force is programmed to consist of approximately 330 positions (160 military, 170 civilians); however, the actual strength will vary depending on requirements. This work force will be progressively reduced as the workload diminishes and will perform only minimum care, custody and security responsibilities until disposal by General Services Administration is consummated.

Kincheloe Air Force Base Area: As a result of a base closure, the natural environment should improve as a result of the termination of airport operations. The socioeconomic impacts, however, are anticipated to be severe in the areas of employment losses, housing vacancies, school enrollment funding losses and other revenue losses. Mitigating measures such as the President's Economic Adjustment Committee (EAC) are available to affected communities. For a more detailed summary and specific quantification of impacts in the Kincheloe area, please turn to page 79, Chapter III, PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT.

Ellsworth Air Force Base Area: The additional personnel and aircraft would have some adverse effect on schools and housing (over-crowding) and an insignificant increase in noise and air pollutants.

It should be noted that due to programmed actions, Ellsworth AFB would receive a net increase of only six aircraft.

K.I. Sawyer Air Force Base Area: The impacts resulting from the two additional B-52H aircraft would be minor except in the housing area where a shortage currently exists. Due to other realignment actions, K.I. Sawyer will receive a net increase of three aircraft (plus four B52H's, less one KC-135).

ALTERNATIVES SUMMARY

Alternative No. 1: Relocate active forces presently assigned to Wurtsmith AFB and close the base by the end of Fiscal Year 1977.

Alternative No. 2: Relocate active forces presently assigned to Blytheville AFB and close the base by the end of Fiscal Year 1977.

Alternative No. 3: No action or status quo.

SPECIAL NOTE

The evaluation of the socioeconomic impact of the proposed closure of Kincheloe AFB and of the alternatives revealed that the economy of the area of impact around the base would suffer severely in all cases. Unemployment rates would rise drastically, local businesses would endure economic hardships, real estate values would decrease, and school budgets would suffer the loss of federal and other student population-related funds, to mention but a few of the more prominent impacts.

Two communities prepared their own analyses of the impacts of the proposed action on their locale. Some of the impact quantification developed in these studies differ from those developed by the AF for the Final Environmental Impact Statement. The differences lie primarily in the degree of severity; both studies indicate that a major socioeconomic impact will result if the proposed action is implemented.

The Air Force recognizes that the closure of any major installation may have a significant adverse impact on the socioeconomic climate of the surrounding area. The Air Force also recognizes the necessity of making an adequate prediction of the impact on the various aspects of the socioeconomic environment. In many instances, this impact can only be estimated by means of statistical prediction of the behavior of people, i.e., how many will leave an area to seek employment elsewhere, how many will retire, etc. By their nature, these predictions are not precise, and equally competent statisticians and analysts may arrive at differing quantified results but the same general conclusions. Since both sets of numbers describe severe impact, absolute accuracy is not necessary for this impact to be given appropriate consideration in decision-making.

In order to provide the decision maker with the best available information on the expected impacts, the Air Force will present its best estimate and, where review comments indicated different values, the range of those values. In this manner we will bring to the decision makers' attention these divergent opinions.

Note on Impact Area Definition And Employment Multipliers

As noted in the Draft Socioeconomic Assessment of Potential Impacts (Background Study), the conclusions presented in the DEIS were subject to additional refinement and modification based on interviews and data supplementation derived through pre-public hearing meetings and the informal public hearings conducted in the local jurisdictions.

The Primary Impact Area for each base now includes only those political subdivisions, population centers and employment nodes that would be most severely affected by base closure or reduction. In reevaluating the boundaries of the Primary Impact Area for each Air Force base, the following criteria were utilized:

- o That at least 90 percent of all Air Force Base personnel and their dependents reside within the boundaries of the Primary Impact Area;
- o That it be defined in terms of major political subdivisions which would be fiscally impacted and for which comparable and standardized secondary data were available; and,
- o That it correspond with the U.S. Commerce Department, Bureau of Economic Analysis designations of Labor Market Areas, employment areas and commutation sheds for which labor force, employment and unemployment data are reported.

Thus, Chippewa County has been designated as the Primary Impact Area for Kincheloe Air Force Base (ninety-eight percent of all base personnel and their dependents reside in this one county). This represents a change from the DEIS in which Mackinac County was included.

In deriving the employment multipliers discussed in the draft socioeconomic impact assessment, employment data (civilian and military) for each of the candidate bases was obtained over a selected time period. This data was then analyzed by industrial category and the basic-service

distinctions made. Although certain industrial sectors were classified "a priori", most basic-service distinctions were made based on assumptions derived from the review of published data. The analysis relied largely on a review of commodities produced and markets served. In that report, the civilian employment multiplier for Kincheloe AFB was derived against a two-county employment profile. It was statistically tested and shown to be below an acceptable confidence level. Therefore, the multiplier used was simply the ratio of services to basic employment in 1975.

Based on subsequent substantive comments, additional data analysis, redefinition of the Primary Impact Area and the incorporation of a systematic location quotient methodology into the derivation of multipliers, the civilian and military employment multipliers for the three based have been revised. The methodology utilized in deriving the revised multipliers has been applied uniformly for all three bases.

In summary, refinements in these and other substantive areas resulted in differences between the DEIS and FEIS values in the several areas such as unemployment, population loss, retail sales and housing vacancies at Kincheloe, Blytheville and Wurtsmith AFBs. The quantities presented in the final statements are believed to represent a more realistic measure of probable impact. It should be noted that this refinement of predicted impacts is a normal out come of the environmental assessment process and the reason for the public and other agency review and comment on the DEIS.

Date Draft Environmental Impact Statement was made available
to the Council on Environmental Quality and the public:

3 September 1976

Date Final Environmental Impact Statement was made available
to the Council on Environmental Quality and the public:

22 FEB 1977

LISTING OF COMMENTERS

The Department of the Air Force through public notices and letters solicited from private citizens, business persons, educators, clergymen, elected and appointed officials, private and public organizations, news media, federal, state and local agencies comments to be considered in the preparation of the Final Environmental Impact Statement.

The following listings reflect the officials, individuals, agencies and others from whom oral or written comments were received and who have been provided a copy of the Final Environmental Impact Statement.

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LOCATION OF REFERENCE COPIES

Copies of the Final Environmental Impact Statement (FEIS) with Appendices and the Background Studies referenced in Chapter X, Bibliography have been sent to the following libraries (which also hold the Draft Environmental Impact Statement) for the convenience of the citizens in the local communities who wish to review the FEIS and various documents used in its preparation.

Kincheloe AFB:
449 CSG/Base Library
Kincheloe AFB, Michigan 49788

Bayliss Public Library
501 Court
Sault Ste. Marie, Michigan
49783

St. Ignace Public Library
Municipal Building
St. Ignace, Michigan 49719

Clark Township Library
Cedarville, Michigan 49719

Kinross Township Hall
Kinross, Michigan 49752

Blytheville AFB:
97 CSG/Base Library
Blytheville AFB, Arkansas
72315

Blytheville Public Library
200 North Fifth
Blytheville, Arkansas 72315

Osceola Public Library
320 West Hale
Osceola, Arkansas 72370

Steele Public Library
Main Street
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REQUEST FOR COPIES

Copies of the FEIS have been provided to the individuals, organizations and public agencies listed on pages viii-xxii other persons or organizations in the areas of the affected Air Force bases may obtain copies of the FEIS and/or Appendices by writing to the Base Information Officer at either Kincheloe AFB, Michigan, Blytheville AFB, Arkansas, or Wurtsmith AFB, Michigan.

449 BMW/OI
Kincheloe AFB, MI 49788

97 BMW/OI
Blytheville AFB, AR 72315

379 BMW/OI
Wurtsmith AFB, MI 48753

Persons or organizations outside the referenced areas should address their requests to HQ USAF PREV, Washington, D.C. 20330.

DISTRIBUTION OF THE FINAL ENVIRONMENTAL IMPACT STATEMENT

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STANDARD
AIR FORCE ENVIRONMENTAL REFERENCE NUMBER (AFERN)
SYSTEM

This "index" is the standard environmental attribute identification system used by the Air Force and adapted for ease in finding information within Background Studies 1 through 6.

<u>AFERN</u>	<u>ENVIRONMENTAL ATTRIBUTE</u>
3.0	<u>NATURAL ENVIRONMENT</u>
3.1	<u>EARTH</u>
3.2	<u>WATER</u>
3.2.1	HYDROLOGY
3.2.2	WATER QUALITY
3.2.3	POLLUTION
3.3	<u>AIR</u>
3.3.1	METEOROLOGY
3.3.2	EMISSIONS INVENTORY
3.3.3	AMBIENT AIR QUALITY
3.3.4	ON-BASE SAMPLING LOCATION, AMBIENT AIR QUALITY
3.4	<u>BIOTIC ENVIRONMENT</u>
3.4.1	PLANTS
3.4.2	ANIMAL
3.5	<u>RESOURCES</u>
3.5.1	FUEL RESOURCES
3.5.2	NON-FUEL RESOURCES
3.6	<u>SPECIAL INTEREST AREAS</u>
3.7	<u>NATURAL HAZARDS</u>
4.0	<u>HUMAN ENVIRONMENT</u>
4.1	<u>DEMOGRAPHIC</u>
4.1.1	POPULATION
4.1.2	ETHNIC/RACIAL DISTRIBUTION
4.1.3	MARITAL STATUS
4.1.4	HOUSEHOLD COMPOSITION AND SIZE

- 4.1.5 EDUCATIONAL ACHIEVEMENT, PERSONS 25 YEARS OF AGE
AND OLDER
- 4.1.6 INCOME LEVELS - (FAMILY)
- 4.1.7 OCCUPATION BY CATEGORY
- 4.2 ECONOMIC CHARACTERISTICS
 - 4.2.1 DEFINITION OF THE REGION'S ECONOMY
 - 4.2.2 EMPLOYMENT
 - 4.2.3 PUBLIC FINANCE
 - 4.2.4 BASE PROCUREMENT
 - 4.2.5 HOUSING
 - 4.2.6 SUMMARY OF THE REGIONS ECONOMY
- 4.3 INSTITUTIONAL CHARACTERISTICS
 - 4.3.1 GOVERNMENT
 - 4.3.2 DECISION PROCESS
 - 4.3.3 EDUCATION
 - 4.3.4 MEDICAL
 - 4.3.5 COMMUNITY SERVICES AND FACILITIES
- 4.4 ACTIVITY SYSTEMS AND PLANS
 - 4.4.1 TRANSPORTATION
 - 4.4.2 UTILITIES
 - 4.4.3 LAND USE
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 - 4.5.2 AIRSPACE REQUIREMENTS
 - 4.5.3 AIRSPACE UTILIZATION
 - 4.5.4 AIR OPERATIONS
 - 4.5.5 AIRSPACE EVALUATION
 - 4.5.6 FLIGHT SAFETY EVALUATION
 - 4.5.7 MAINTENANCE/AIRCRAFT GROUND OPERATIONS
 - 4.5.8 OPERATIONAL CHANGE EVALUATION

GLOSSARY

Air Installation Compatible Use Zone (AICUZ)

A Department of Defense program designed to prevent the degradation of mission capability due to encroachment and to protect local citizens from noise and accident hazards associated with flying activities.

Air Reserve Force (ARF)

All units, organizations, and members of the Air National Guard of the United States and the United States Air Force Reserve.

Base Operating Support (BOS)

All resources required to maintain an installation in an operationally active status in support of a primary mission. Includes all manpower and operation and maintenance expenditures for such support.

Contractor Operated Civil Engineering Supply Store (COCESS)

Contractor Operated Parts Store (COPARS)

Council on Environmental Quality (CEQ)

An Executive Council, established by Public Law 91-190, which reviews programs and activities of the Federal Government in light of the National Environmental Policy Act of 1969 (PL 91-190), and which formulates and recommends national policies to promote the improvement of the quality of the environment.

Emergency War Order (EWO)

The order issued by competent authority to launch combat-ready weapon systems maintained in readiness for or generated for wartime strike operations.

Fiscal Year (FY)

Twelve month period selected for accounting purposes. The fiscal year is designated by the calendar year in which it ends. FY 77 begins October 1, 1976 and ends September 30, 1977.

Military Construction Program (MCP)

Those funds appropriated by Congress and accruing to the Department of Defense (DOD), utilized to construct real property facilities and provide real property installed equipment in support of the stationing of US forces and the maintenance of weapon systems.

Non-appropriated Fund Instrumentality (NAFI)

A procurement category which does not obligate appropriated funds.

Nonoperating Active (NOA)

An allowance of aircraft over and above the authorized unit equipment to permit heavy maintenance, modifications, and inspect and repair as necessary without reduction of numbers of units available for operations. The normal allowance is ten percent of unit equipment for combat systems, five percent for trainers, and two percent for support aircraft. No funds, manpower or flying hours are allocated for these aircraft in the Air Force budget. Included are other aircraft in nonflyable status when they are programmed to be eventually returned to active flying.

Petroleum, Oil, and Lubricants (POL)

Single Integrated Operational Plan (SIOP)

The SIOP is a nuclear war plan which incorporates all United States nuclear weapons systems into a single plan for application against a potential enemy.

Tenant

A unit, other organization, detachment, or person assigned to one commander and under the operational control either of the commander to whom assigned, or of another, but occupying or using, on a more or less permanent basis, certain quarters or other real property under the jurisdictional control of a different commander.

Unit Equipment (UE)

The number of active operating aerospace vehicles authorized to a unit for performance of its operational mission. The unit equipment authorization forms the basis for the allocation of operating resources to include manpower, support equipment, and flying hour funds.

PART I. FINAL ENVIRONMENTAL IMPACT STATEMENT

I. INTRODUCTION

A. DESCRIPTION OF PROPOSED ACTION

Severe budget restraints and the effects of inflation require the Air Force to examine every possible method of reducing costs. Due to force reductions and adjustments, the Air Force has greater strategic bomber and tanker basing capacity than it requires. In considering ways of reducing this excess basing capacity, it has been determined that a reduction could be achieved with a significant manpower and dollar savings by realigning the SAC base structure.

The Air Force is in the process of transferring 128 KC-135s from the active force to the Air Reserve Force to comply with Secretary of Defense Program Decision Memorandum (PDM) dated July 29, 1974, and amended August 22, 1974. The transfer of aircraft to the Air Reserve Force units began in the summer of 1975 and has been proceeding at a rate of one unit conversion (eight aircraft) per fiscal quarter. With the knowledge and experience we have gained with this program, we are convinced that we can now successfully convert two Air Reserve Force units per fiscal quarter. This increased rate of conversion would more quickly bring the Reserve Force into the strategic mission and advance by one year the retirement of older, less efficient weapon systems presently operated by the Reserve Force.

In addition to the transfer of KC-135s from the active force, there are programmed or possible adjustments that affect the B-52 force. One squadron of B-52s was transferred to nonoperating active status as of September 30, 1976 and one squadron of B-52s could be redistributed to other installations already equipped with similar aircraft and possessing some excess capacity. These actions would reduce the number of B-52 squadrons by two while still retaining

strategic operational capability. The net effect of these actions, within the Strategic Air Command (SAC) basing structure, is a capacity in excess of requirements.

Strategic Air Command B-52s and KC-135s are, in general, located on installations that also support other Air Force missions. There have been no concurrent drawdowns in other activities co-located with the strategic forces; and consequently, the redistribution of strategic forces from these installations would not generate large savings in support costs, as the installations would still be required to support the other major activities. Maximum savings, therefore, can be realized by closure or reduction of those installations presently supporting a single B-52/KC-135 mission.

As a result of a preliminary review, the Air Force determined that the following candidate action would result in substantial resource savings with minimum impact on combat capability and that this candidate action merited detailed study.

Candidate Action

Inactivate the 449th Bombardment Wing and its supporting organizations, close Kincheloe AFB by the end of fiscal year 1977 and declare the base excess to Air Force requirements.

The 16 B52H aircraft would be relocated, 14 to Ellsworth AFB, SD and 2 to K.I. Sawyer AFB, MI. The 16 KC-135 aircraft assigned to Kincheloe AFB would be relocated and transferred to the Air Reserve Forces. All military and civilian positions would be eliminated by the end of FY 1977 except for a caretaker force which would be retained until completion of base disposal. Initially, the caretaker force is programmed to consist of approximately 330 personnel (160 military, 170 civilian), however, the actual strength will be dependent on requirements. A comparison of assigned strength as of March 31, 1976 and projected authorizations as of July 1, 1977 follows:

Table I.1. COMPARISON OF ASSIGNED AND PROJECTED
AUTHORIZED STRENGTH, KINCHELOE AFB, 1976, 1977

	<u>Assigned March 31, 1976</u>	<u>Projected July 1, 1977</u>
<u>Authorized</u>		
<u>Military</u>		
Officer	460	380
Airmen	<u>2614</u>	<u>2310</u>
Subtotal	3074	2690
<u>Civilian</u>		
DAF - Appropriated	543	470
Total	3617	3160
<u>NAF/A&AFES</u>		
<u>NAF</u>		
NAF (Full Time)	25	20
NAF (Part Time)	<u>122</u>	<u>120</u>
Subtotal	147	140
<u>A&AFES Employees</u>		
Full time	34	30
Part time 1/	<u>63</u>	<u>60</u>
Subtotal	97	90
<u>A&AFES Concessions</u>		
Full time	7	5
Part time 1/	<u>8</u>	<u>5</u>
Subtotal	15	10
Total NAF/A&AFES	259	240
Grand Total	3876	3400

1/ The part-time employees have been converted to full time equivalent (FTE) for the socioeconomic portion of this statement. The FTE is 3,811 personnel. The personnel figures listed above are actual assigned as of March 31, 1976 and projected for FY 1977.

The assigned number on March 31, 1976 exceeds the July 1, 1977 authorizations because of on-going program changes and Air Force-wide reductions in authorizations. For the purpose of the environmental evaluation, the impact resulting from the total loss of personnel from the March 31, 1976 level (3,876 to zero) will be used. However, a reduction from the March 31, 1976 assigned strength level to the July 1, 1977 authorized level (3,400) would occur without regard to this candidate action.

The relocation of aircraft would result in a net increase of approx. 500 & 140 military authorizations at Ellsworth and K.I. Sawyer AFB's, respectively. The impacts at Ellsworth AFB would include adverse effects on the school system and housing markets as well as increases in noise and air pollutants. The impacts at K.I. Sawyer AFB would be minor except for a serious impact on the housing market in the area due to an existing shortage of available units. These impacts have been evaluated in separate assessments, and determined to not constitute significant impacts on the quality of the human environment and, thus, an Environmental Impact Statement is not required.

B. EXISTING SITE CHARACTERISTICS

This section provides a general characterization of existing natural, demographic, economic, institutional and other features of the areas that would be affected by the proposed action or its alternates. The specific geographic areas covered are those within which the following bases are located: Kincheloe Air Force Base, MI; Wurtsmith Air Force Base, MI; and Blytheville Air Force Base, AR.

Within the vicinity of each base, a Primary Impact Area has been delineated. Coterminous with major civil divisions, this Primary Impact Area would bear the brunt of the impacts and be most severely affected by base closure. In addition, specific communities or minor civil divisions within the Primary Impact Area that would be particularly impacted have been singled out for analysis where possible. Communities and political jurisdictions outside the Primary Impact Area that would nonetheless be measurably impacted by base closure have been identified as appropriate.

To provide comparability throughout the analysis, March 31, 1976 is the uniform date used in measuring baseline conditions for all quantifiable elements.

1. KINCHELOE AIR FORCE BASE AREA

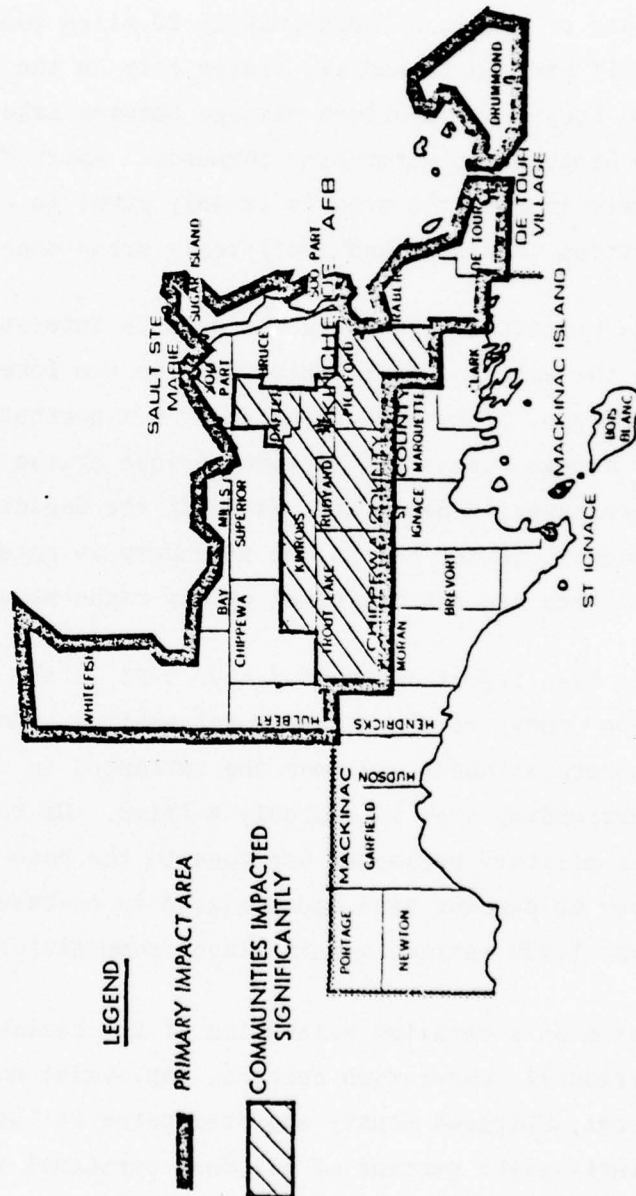
Kincheloe Air Force Base is located in the Upper Peninsula of the State of Michigan approximately 20 miles south of Sault Ste. Marie. Sault Ste. Marie and its sister city on the Canadian side straddle the Soo Locks, an important passage between Lake Huron and Lake Superior in Great Lakes waterborne commerce. Apart from the City of Sault Ste. Marie itself, the area is largely rural in character with sparsely settled townships and small-scale urban nodes.

The principal highway in the area is Interstate 75 which provides access to the eastern Upper Peninsula from the lower mainland portion of Michigan. This highway extends in a northerly direction from its point of access across the Mackinac Bridge at the City of St. Ignace and terminates in Sault Ste. Marie at the Canadian border. Most other roadways in the region are secondary in nature; large portions of the area are not traversed by any roads at all.

The base itself is located near I-75 in the Kinross Township of Chippewa County within a very rural setting. Small residential and commercial nodes are near the entrances to the base but the immediate surrounding area is sparsely settled. Of the 3,876 total civilian and military personnel assigned to the base on March 31, 1976, just over 60 percent were accommodated in on-base housing while somewhat over 1,400 resided within nearby communities.

Based on a detailed evaluation of the residence patterns among base personnel, population centers, employment nodes and commutation patterns, Chippewa County was designated as the Primary Impact Area. Ninety-eight percent of all base personnel and their dependents reside within the county and this jurisdiction would bear the brunt of economic and fiscal impacts stemming from base closure. Moreover,

EASTERN UPPER PENINSULA PLANNING REGION
KINCHELOE AFB AND SURROUNDING JURISDICTIONS



Chippewa County has been designated as the Labor Market Area for the region in which the Air Force Base is located.

With an estimated county population of 36,350, base personnel and dependents within Chippewa County accounted for 26.7 percent of the population total. Moreover, a number of townships and other civil divisions within the county have comparably high concentrations of base personnel. Specific civil divisions in which base personnel and their dependents live and amount to at least 100 people or account for at least five percent of the total population are presented in the table below.

Table I-2. KINCHELOE AIR FORCE BASE IMPACT AREAS

		Base Personnel and Dependents	
		Residing in Area	
	Estimated 1976		Percent of
	Population	Number	Total Population
Primary Impact Area:			
<u>Chippewa County</u>			
Kinross Twp.	8,320	6,280	75.5%
Kincheloe AFB	(5,900)	(5,900)	(100.0)
Balance of Twp.	(2,420)	(380)	(15.7)
Sault Ste. Marie City	16,400	1,670	10.2
Dafter Twp.	1,030	220	21.4
Pickford Twp.	1,330	360	27.1
Rudyard Twp.	1,470	340	23.1
Superior Twp.	780	120	15.4
Trout Lake Twp.	330	30	9.1
Subtotal	29,660	9,020	30.4
Balance of Chippewa County	6,690	690	10.3
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>36,350</u>	<u>9,710</u>	<u>26.7%</u>
Other Impact Areas:			
<u>Mackinac County</u>			
Clark Twp.	2,060	130	6.3%
Balance of Mackinac County	8,630	70	0.8
<u>TOTAL OTHER IMPACT AREAS</u>	<u>10,690</u>	<u>200</u>	<u>1.9%</u>

Source: Hammer, Siler, George Associates

As illustrated, Kinross Township accounts for the largest number of base personnel and their dependents; approximately 75 percent of the total township population is base-related. The largest single number of off-base personnel reside within the City of Sault Ste. Marie. With its larger population base, the 1,670 base personnel and their dependents account for approximately 10 percent of the city's total population. Though smaller in number, base-related populations residing in five other townships account for approximately 10 to nearly 30 percent of the total. In sum, base personnel are widely distributed among the civil divisions of Chippewa County and account for a significant share of total population in many of them.

Only two percent of base personnel and their dependents live outside the Primary Impact Area and these reside within Mackinac County. Most of these are located in Clark Township abutting the southern boundary of Chippewa County. Though their numbers are small, the 130 base-related population in Clark Township accounts for six percent of the total. Throughout the balance of Mackinac County, base personnel and their dependents account for less than one percent of the total population.

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

The topography of Kincheloe AFB and the surrounding area is relatively flat with drainage being away from the base in all directions. The base is located on glacial outwash plain and the sub-surface soil below the topsoil is a loose, uniform sand.

WATER (AFERN 3.2)

The area is a known geologic water surplus area. Eight drilled wells are the source of water for the base. There are four principal streams and rivers within a ten mile radius of the base. Water quality at the base and in the region is considered good.

AIR (AFERN 3.3)

Due to the remote location of the base there is no air emission inventory for the surrounding region. Air pollution is not a problem in the region surrounding the base.

BIOTIC ENVIRONMENT (AFERN 3.4)

The base and surrounding area are predominantly forested. Approximately 4,000 acres of the total land base area of 6,000 acres remains as natural, unimproved land. The acreage is primarily forestland of the northern hardwood forest type.

Overall, the forestland on base is not unique and blends in with the surrounding area. The area contains a normal population of game animals, song birds and flowering plants associated with the forestland. No threatened or endangered species or plants or animals are known to exist on the base.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1.1)

In the early 1960's major Strategic Air Command units were transferred to Kincheloe Air Force Base; this transfer of personnel and their dependents increased the total population living in the Township. Apart from this base-related population impact on Kinross Township, virtually every other civil division within Chippewa County lost population over the decade. Population changes over the 1960-70 decade and estimates for 1976 are presented in the table on the following page. Because the reporting periods over the 16 year span are not equivalent, percentage rates of change have been expressed on an average annual basis.

Table I-3. POPULATION TRENDS, KINCHELOE AIR FORCE
BASE IMPACT AREAS, 1960, 1970 AND 1976

Primary Impact Area:	Population			Average Annual Rate of Change	
	1960	1970	1976	1960-70	1970-76
<u>Chippewa County</u>					
Kinross Twp.	1,958	6,763	8,320	24.5%	2.0%
Sault Ste. Marie City	18,722	15,136	16,400	-2.1	1.3
Dafter Twp.	1,070	942	1,030	-1.3	1.5
Pickford Twp.	1,302	1,198	1,330	-0.8	1.8
Rudyard Twp.	1,486	1,273	1,470	-1.6	2.4
Superior Twp.	906	694	780	-2.6	2.0
Trout Lake Twp.	400	306	330	-2.6	1.3
Subtotal	25,844	26,312	29,660	1.2	2.0
Balance of Chippewa County	6,821	6,100	6,690	-1.1	1.6
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>32,665</u>	<u>32,412</u>	<u>36,350</u>	<u>-0.1%</u>	<u>2.0%</u>
<u>Other Impact Areas:</u>					
<u>Mackinac County</u>					
Clark Twp.	1,563	1,771	2,060	1.3%	2.6%
Balance of Mackinac County	9,290	7,889	8,630	-1.6	1.5
<u>TOTAL OTHER IMPACT AREAS</u>	<u>10,853</u>	<u>9,660</u>	<u>10,690</u>	<u>-1.2%</u>	<u>1.7%</u>

Source: U.S. Census of Population 1960 and 1970;
and Hammer, Siler, George Associates

Since the Air Force base population was not included in the 1960 Census, population growth in Kinross Township over the succeeding decade is grossly overstated in the table above: the bulk of the reported growth is simply attributable to inclusion of Kincheloe AFB population in the 1970 counts. If the Air Force base population is excluded from the 1970 counts to provide comparability with 1960 data, the off-base population in the county as a whole declined 20 percent over the decade.

In contrast to the losses over the prior decade, population in the county and its component subdivisions increased somewhat since 1970. In no small part, these population gains can be attributed to Kincheloe personnel levels. Between 1972 and 1976, personnel levels at Kincheloe AFB increased by 357 positions. Dependents of these personnel plus additional increases in civilian employment and their dependents account for a large portion of the growth in Chippewa County since 1970. In addition, growth in the tourism industry and an increasing number of retirees taking up residence in the county have contributed to population growth in recent years.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

There are three principal components in the economic base of the Chippewa County Primary Impact Area: the Air Force base itself, the Soo Locks and Great Lakes waterborne commerce as well as an expanding tourism industry.

The Soo Locks date back to 1855 when the first ship canal was built with Congressional aid. The Locks were transferred to the United States Government in 1881 and placed under the jurisdiction of the U.S. Army Corps of Engineers; the Engineers have operated the Locks since that time. As the only water connection between Lake Superior and the other Great Lakes, ships passing through the Soo Locks carry two-thirds of the iron ore produced in the United States and Canada annually. While there is little spin-off employment related to goods movements through the Locks, they have become an important tourism attraction in the area.

Largely seasonal in nature, the tourism industry attracts visitors because of the Locks, natural amenities, as well as hunting, fishing and other water-related activities. Particularly in the City of Sault Ste. Marie, a wide variety of establishments cater to the tourist trade on a seasonal basis.

EMPLOYMENT (AFERN 4.2.2)

In March 1976, the resident civilian labor force in Chippewa County consisted of 11,225 persons. The 1975 unemployment rate for Chippewa County was 18.7%. This severe and persistent unemployment rate was more than twice the national average of 8.1 percent. Of the more than 11,000 in the civilian labor force, approximately 8,000 were employed in Primary Impact Area jobs. Of this number, 3,675 or 45.9 percent of the total were employed in civilian government jobs. Because of the Corps of Engineers activity at the Soo Locks and Kincheloe Air Force Base itself, government sector employment was abnormally high. A profile of civilian employment is presented in the table below.

Table I-4. CIVILIAN EMPLOYMENT PROFILE, KINCHELOE AFB
PRIMARY IMPACT AREA, MARCH 1976

<u>Sector</u>	<u>Employment</u>	<u>Percent of Total</u>
Agriculture	350	4.4%
Construction	275	3.4
Manufacturing	375	4.7
T.C.U. ^{1/}	550	6.9
Trade	1,575	19.7
F.I.R.E. ^{2/}	225	2.8
Services	975	12.2
Government	<u>3,675</u>	<u>45.9</u>
Total	8,000	100.0%

^{1/} Transportation, Communications, Utilities

^{2/} Finance, Insurance, Real Estate

Source: Michigan Employment Security Commission.

With very little agricultural or manufacturing employment, the lack of diversity in the economy is underscored by the heavy dependence on government activity. As a consequence, the economy is very fragile and highly sensitive to external changes in government policy.

KINCHELOE PERSONNEL AND PAYROLLS

As of March 31, 1976, 3,811 persons were employed at Kincheloe Air Force Base. Of this number, 3,074 were assigned military personnel and 737 were FTE assigned civilian personnel. The majority of the civilian personnel were Department of the Air Force (DAF) Appropriated Fund Civil Service and Wage Board employees. The employment profile for Kincheloe Air Force Base is presented on the following table.

Table I-5. ON-BASE EMPLOYMENT PROFILE
KINCHELOE AFB, MARCH 31, 1976

<u>Assigned Military</u>	<u>Number of Personnel</u>
Officers	460
Airmen	<u>2,614</u>
Subtotal	(3,074)
<u>Assigned Civilian</u>	
DAF Appropriated	543
Non-Appropriated Fund ^{1/}	<u>194</u>
Subtotal	(737)
Total	3,811

^{1/} Includes the full-time equivalent for part-time AAFES personnel.

Source: Headquarters, United States Air Force,
Programs and Resources, Bases and
Units Division

Civilian and military payrolls on the base represent an important component in total personal income (TPI) for the Chippewa County Primary Impact Area.

As illustrated in the table below, monthly gross payrolls during March 1976 totalled \$3,025,850. On an annual basis, Kincheloe AFB payrolls amount to \$36.3 million and account for approximately 23 percent of total personal income in the Primary Impact Area.

Table I-6. ESTIMATED MONTHLY GROSS PAYROLL
KINCHELOE AFB, MARCH 1976

<u>Military</u>	<u>Amount</u>
Officers	\$ 681,010
Airmen	<u>1,678,540</u>
Subtotal	(\$2,359,550)
<u>Civilian</u>	
DAF Appropriated	\$565,860
Non-appropriated Fund	<u>100,440</u>
Subtotal	(\$666,300)
Total	\$3,025,850

Source: November 30, 1976 Leave and Earning Statement File, U.S. Air Force Accounting and Finance Center; Non-appropriated Fund Financial Analysis Office, Kincheloe Air Force Base.

RETAIL SALES

In 1975, the last full year for which comprehensive retail sales data is available, retail sales in Chippewa County totalled \$79.7 million. This figure does not include sales on the Air Force Base itself in the commissary, exchange and clubs. Apart from such on-base spending, Kincheloe personnel accounted for a maximum of \$10.8 million in retail sales at Primary Impact Area establishments in the civilian sector, 13.5 percent of total reported sales.

PUBLIC FINANCE (AFERN 4.2.3)

The State of Michigan collects personal income and sales taxes from Primary Impact Area residents; Chippewa County itself, however, does not assess

income or sales taxes. At the local level, major revenue sources include ad valorem real property taxes, federal revenue sharing as well as PL 81-874 funds to school districts impacted by the dependents of federal employees. A miscellany of other user charges, fees and fines round out local revenue sources.

The City of Sault Ste. Marie has capital improvements planned or underway with a total cost of \$7.4 million over the next three years. These programs include water and sewer repairs and extensions, a housing project and urban renewal. Chippewa County has programmed projects worth \$670,000 over the next two years, primarily in the areas of road and bridge construction.

BASE PROCUREMENT (AFERN 4.2.4)

In Fiscal Year 1976, Kincheloe AFB made approximately \$25 million worth of non-construction purchases. Of this amount, approximately \$5.5 million or 22.2 percent of the total was made within the Primary Impact Area. A profile of non-construction procurements is presented in Table 6, below.

Table I-7. NON-CONSTRUCTION PROCUREMENTS IN THE PRIMARY IMPACT AREA, KINCHELOE AFB, FISCAL YEAR 1976

<u>Category</u>	<u>Total Procurements (000)</u>	<u>Procurements In Primary Impact Area</u>	
		<u>Amount (000)</u>	<u>Percent</u>
Supply	\$ 235.0	\$ 55.0	23.4%
Commissary	4,383.6	447.1	10.2
Exchange	3,934.9	741.4	18.9
Civil Engineering	209.1	72.1	34.5
Contract Maintenance	34.7	4.2	12.0
Medical	138.1	8.3	6.0
NAFI	888.8	698.7	78.6
Miscellaneous Services	37.0	14.9	40.4
COPARS	209.5	0	0
COCESS	716.7	0	0
Travel of Persons	150.2	137.8	91.7
Travel of Things	1,245.6	1,245.6	100.0
Utilities and Rent	832.9	403.2	48.4
Communications	286.0	23.6	8.2
POL	11,689.3	1,684.6	14.4
(JP-4)	(9,979.5)	(0)	(0)
Total	\$24,991.4	\$5,536.5	22.2%

Source: Base Procurement, Supply, Transportation, Exchange, Accounting and Finance Office, Kincheloe AFB, Michigan.

As indicated, base commissary and exchange procurements in the Primary Impact Area amounted to approximately \$1.2 million during the fiscal year that ended June 30, 1976. However, most of the Army/AF Exchange Service purchases are made on a regional basis and thus have a minimal local impact.

Fuel and other petroleum products accounted for another \$1.7 million in local procurement awards. Other base procurements tend to be concentrated in the services provision category. Such services include contract maintenance, the transport of persons and things and miscellaneous services. One of the largest categories of local procurement awards was for the "travel of things." The beneficiaries of these procurements are the numerous moving and storage firms in the area; there are approximately 15 such firms in Sault Ste. Marie alone.

While non-construction procurements are relatively stable from year to year, construction procurements may fluctuate greatly depending on the projects undertaken. To evaluate the impact of base construction on the local economy, average annual awards in recent years is the best measure. While the amounts during a single fiscal year ranged from a low of approximately \$25,000 to a high of \$1.2 million, they averaged roughly \$327,000 over the past seven fiscal years. The table below summarizes base construction procurements.

Table I-8. ANNUAL CONSTRUCTION AWARDS IN THE PRIMARY IMPACT AREA, KINCHELOE AFB, FISCAL YEARS 1970-1976

<u>Fiscal Year</u>	<u>Total Construction Awards</u>	<u>Construction Awards In Primary Impact Area</u>
1970	\$ 66,206	\$ 24,099
1971	502,511	189,777
1972	1,358,615	326,198
1973	1,296,598	202,924
1974	1,215,121	254,481
1975	2,171,383	1,240,954
1976	208,529	47,099
Annual Average	\$974,080	\$326,505

HOUSING (AFERN 4.2.5)

The housing stock in Chippewa County has several market dimensions. The majority of the stock consists of year-round units occupied by families permanently residing in the area. Hunting cottages and other seasonal units that are not winterized and intended only for intermittent use comprise another market segment. In addition, downstate Michigan residents have built and bought homes meeting year-round construction standards intended for vacation use and/or eventual retirement rather than permanent occupancy.

Because of the large number of seasonal and vacation homes built to year-round standards, use of standard Census vacancy measures distorts true market conditions. Vacant vacation homes built to year-round standards are counted with all other vacant units intended for permanent occupancy even though they have no adverse implications for the market. To compensate for this distortion, the housing stock has been evaluated in purely market terms.

Only those vacant units available for sale or rent have been computed in the vacancy rate to indicate true market conditions. On the assumption that most year-round units vacant at the time of the April Census but not available for sale or rent represent vacation and second homes, these have been grouped with seasonal units and treated as a market separate from that serving the local population base. The results of these adjustments and portrayal of the 1970 housing stock within Chippewa County are presented in the table below.

Table I-9. 1970 HOUSING STOCK CHARACTERISTICS IN THE KINCHELOE AIR FORCE BASE PRIMARY IMPACT AREA

	<u>Sault Ste. Marie</u>	<u>Balance of Chippewa County</u>	<u>Total Primary Impact Area</u>
<u>Total Housing Units</u>	5,231	7,840	13,071
Seasonal Units	29	2,074	2,103
Vacation/Second Homes	<u>292</u>	<u>944</u>	<u>1,236</u>
Subtotal	321	3,018	3,339
Percent of Total Stock	6.1%	38.5%	25.6%
<u>Units Intended for Year-Round Occupancy</u>	4,910	4,822	9,732
Occupied Year-Round Units	4,696	4,600	9,296
Owner-Occupied	(64.8%)	(60.7%)	(62.7%)
Renter-Occupied	(35.2%)	(39.3%)	(37.3%)
Vacant Units for Sale or Rent	214	222	436
Market Vacancy Rate	4.4%	4.6%	4.5%

Source: U.S. Census of Housing, 1970.

Of the 13,000 housing units within Chippewa County, approximately one-fourth were seasonal units and those intended for occasional vacation or second home use. Of the remaining 9,732 units intended for permanent year-round occupancy, only 436 were available for sale or rent. The market vacancy rate within the county as a whole was 4.5 percent, a rate well within normal tolerance levels.

Although the composition of the housing stock was somewhat different in the City of Sault Ste. Marie -- only six percent of the units were intended for seasonal or vacation use -- vacant units for sale or rent represented a market vacancy rate of 4.4 percent. Throughout Chippewa County, then, market vacancy rates hovered about the 4.5 percent mark and were closely in keeping with normal market ranges.

Since 1970, it is estimated that the number of housing units intended for year-round occupancy in Chippewa County increased approximately seven percent. Based on the insights and comments of local real estate brokers, vacancy rates have changed little since 1970 and are estimated to be in the 4.5 percent range. These baseline conditions are depicted in the table below.

Table I-10. ESTIMATED 1976 HOUSING MARKET BASELINE,
KINCHELOE AFB PRIMARY IMPACT AREA

	<u>Sault Ste. Marie</u>	<u>Balance of</u> <u>Chippewa County</u>	<u>Total Primary</u> <u>Impact Area</u>
Units Intended for Year-Round Occupancy	5,091	5,318	10,409
Occupied	4,867	5,073	9,940
Vacant For Sale or Rent	224	245	469
Market Vacancy Rate	4.4%	4.6%	4.5%

Source: Hammer, Siler, George Associates

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

There are five political jurisdictions within a ten-mile radius of Kincheloe AFB. They are the townships of Pickford, Kinross, Dafter, Rudyard, and Bruce. Just north of this radius is the City of Sault Ste. Marie. The government of the City of Sault Ste. Marie is of the Commission-Manager form.

Currently Bruce Township is the only township in the area that has instituted land use and construction ordinances. Four kinds of zoning districts (resort, agricultural, forest, and industrial) were organized with size and structure of buildings designated in each district as well as certain limitations as to noise. The other four townships within a

ten-mile radius of the base (Pickford, Kinross, Dafter, and Rudyard) are expected to establish ordinances similar to those in Bruce township.

The City of Sault Ste. Marie is involved in local planning through the Community Development Office, the City Planning Commission, the Department of Housing and Urban Development, and the 701 City Planning Program.

Matters of regional scope or importance are addressed by the Eastern Upper Peninsula Regional Planning and Development Commission. This agency provides background information to the local government units in the Eastern Upper Peninsula Region (Chippewa, Luce and Mackinac Counties), for their land use and activities. Also, federal regions of HUD, A-95 Clearinghouse, Department of Agriculture and others provide regional frameworks for the local governments.

There has been an active relationship between Kincheloe AFB personnel and their dependents with the various local governments. Numerous base employees either belong to or work with local government agencies. Their positions range from president of the Rudyard Area Public Schools to volunteers in several of the local fire departments. Also, the base AICUZ Project Officer has been appointed to act as liaison between local planning and zoning commissions and the base.

EDUCATION (AFERN 4.3.3)

Three school districts within Chippewa County serve the public school students from 98 percent of the Kincheloe AFB-related households. These districts are: (1) the Rudyard School District, which administers the schools on the base itself and serves Rudyard, Kinross and Trout Lake Townships; (2) the Sault Ste. Marie School District; and (3) the Pickford School District. The 1,906 Kincheloe dependents account for approximately one-fourth of the total enrollment in these three districts. The distributions are presented in the table below.

Table I-11. KINCHELOE AFB DEPENDENTS ENROLLED IN
PRIMARY IMPACT AREA SCHOOL DISTRICTS

<u>School District</u>	<u>1975-76 Total Membership</u>	<u>Kincheloe AFB Dependents</u>	<u>Percent of Total Membership</u>
Rudyard	2,167	1,495	68.9%
Sault Ste. Marie	5,134	339	6.6
Pickford	521	72	13.8
Total	7,822	1,906	24.4%

Source: Superintendent of Rudyard Area Schools; Office of Education, U.S. Department of Health, Education and Welfare; Tab A-1 (revised) Kincheloe AFB; and Hammer, Siler, George Associates

In addition to the public schools, one parochial/private school in the area serves Air Force Base dependents. This school has a total enrollment of 16 students, none of which are military dependents. The number of civilian dependents is not available. Lake Superior State College, located in Sault Ste. Marie, has a current enrollment of 2,200 not including enrollment at the courses conducted on-base. Approximately 100 Kincheloe personnel and dependents attend classes off-base. Over 2,000 military personnel and dependents were enrolled in on-base courses in 1973.

MEDICAL (AFERN 4.3.4)

There are approximately 700 beds in Primary Impact Area civilian hospitals and those in nearby Sault Ste. Marie, Canada. These facilities employ approximately 1750 people. On base, there are an additional twenty beds and a staff of eight physicians.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

An informal mutual aid agreement exists between the base police and all local police departments. In the area of fire protection, a bilateral mutual aid agreement exists between the Base Fire Department and local departments as well as with the Michigan Department of Natural Resources.

Base employees and their dependents are also either directly or indirectly involved with various local community activities such as Kinross Township 4-H Center, adult and youth recreation programs, professional societies, and parks and recreation programs. Two military personnel from Kincheloe AFB serve on the Kinross Parks and Recreation Board. Three military personnel serve in the Kinross Booster Club which was established to promote the betterment of the Kinross Township Community.

Recreational facilities in the region consist of a 300-seat capacity theater, recreation center, five tennis courts, five basketball courts, one 12-lane riding area, and a model airplane flying area. A recreational area, consisting of a 14-acre lake, swimming, beach, and picnic area, is also available.

In the area of cultural opportunities, both the base and the communities surrounding the base benefit from interaction with each other. Military personnel and their dependents contribute to expanding the cultural horizons of local residents because of their travels and exposure to other cultures. In addition, many military related personnel are active in local community affairs and activities.

Major financial institutions in the Primary Impact Area include Central Savings Bank, Citizens State Bank of Rudyard, First National Bank, Sault Savings Bank and the Detroit and Northern Savings and Loan Association.

There are approximately 250 military retirees from all the services residing in Chippewa County at the present time. In addition, many other military retirees who live outside of Chippewa County also make use of the facilities at Kincheloe Air Force Base on a regular basis. Retirees and their dependents are authorized to use the commissary, exchange and the medical facilities at the base, and they have access to many of the administrative services and recreational facilities on the base as well.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

Passenger and air freight service to Kincheloe AFB is provided by the City-County Airport in Sault Ste. Marie and the Sault Ste. Marie Federal Airport of Sault Ste. Marie, Canada. Kincheloe employees primarily use the City-County Airport which has daily flight service provided by North Central Airlines. Kincheloe AFB generates an estimated 40 percent of City-County's passenger business. Approximately 7 percent of the Federal Airport's passenger and freight business is base-related. Surveys by North Central Airlines have indicated that over 50 percent of their business is generated by the presence of Kincheloe AFB.

Chippewa Flying Service also operates out of City-County Airport, providing a charter service, flying school, and airplane rental. Approximately 65 percent of their business volume is base-related.

The Soo Line Railroad is the only line serving the area. Its major rail terminals in the impact area are located in St. Ignace, Rudyard and Sault Ste. Marie. Kincheloe AFB uses the railroad only for the shipment of a small amount of freight and coal for the base heating plant.

The major highway serving the base is Interstate I-75 which is an excellent four-lane highway. Kincheloe is also served by two two-lane highways which link the base to all the road and highway systems in the region. Traffic studies for both the City of Sault Ste. Marie and Chippewa County indicate that the existing highway system in the area is more than adequate to handle present traffic volumes. There are no plans for highway expansion in the immediate vicinity of the base. Plans to upgrade the quality of some roads within Chippewa County as well as the addition of safety measures, such as breakaway sign posts on I-75, have no direct relationship to the base. Projects undertaken by local taxpayers for the benefit of Kincheloe Air Force Base have included resurfacing and widening roads around the base.

There is presently no data available on the percentage of traffic on area highways which is generated by base personnel. A July 1973 traffic study conducted at the front and back gates of the base estimated peak traffic loads at 400 to 800 vehicles per hour during rush hours (0700 to 0800 and 1700 to 1800). There are no known traffic safety hazards in the area created by base personnel entering and leaving the base.

The Eastern Upper Peninsula Transportation Authority, which manages the bus terminal in Sault Ste. Marie, recently invested \$42,000 in extra facilities and equipment to support the requirements of the base. Kincheloe AFB accounts for about 39 percent of the yearly passenger service and 23 percent of the yearly freight service. In addition, a Dial-A-Ride bus service, a joint Federal and local government project, operates in Sault Ste. Marie with about 250 rides per day. However, data are not available on the exact percentage of base personnel utilizing this service.

UTILITIES (AFERN 4.4.2)

All water used on base is obtained from wells. Water used by off-base households of military and civilian personnel is also from privately owned wells with the exception of water obtained from municipal water services in Sault Ste. Marie, Cedarville, and St. Ignace.

Kincheloe AFB has its own sewage treatment plant. The average daily flow of sanitary wastes is 0.65 million gallons per day. The sanitary wastewater treatment plant is of the trickling filter type and is capable of handling twice the present base generation. Current effluent data indicates that the treatment plant is in compliance with the final effluent requirements of the Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) permit.

The only civilian community sewage treatment plants in the region are in Sault Ste. Marie and St. Ignace. The Sault Ste. Marie sewage treatment plant has a current total flow of 4 million gallons per day.

Kincheloe AFB purchases natural gas, electricity, telephone service, and fuel oil from local sources.

A portion of the solid waste generated is collected by private contractors and disposed of in an off-base state-licensed landfill. The sludge from the sewage treatment plant is disposed of in the base sanitary landfill which has a life expectancy of 15 years.

LAND USE (AFERN 4.4.3)

Kincheloe AFB is located midway in the central corridor of U.S. Interstate 75. A significant amount of the commercial strip development located in Chippewa County borders I-75 along this area. The most intensive recreational use areas of the county are near bodies of water and along major access roads. Residential use lands are concentrated in the City of Sault Ste. Marie, a primary population center of the county. The communities of Rudyard and Dafter serve as secondary population centers while the town of Kinross serves as a tertiary population center. Major land uses in these communities are currently residential and agricultural with numerous mixed use developments.

Over 75 percent of the county's land area is forest land which is largely in federal and state forests. Wood production is one of several basic economic activities, although an increasing amount of forest land is being used for recreation and recreation-oriented development. Agricultural land use constitutes about 9.5 percent of the county's total land area, with most of the prime agricultural land in the eastern half of the county. Most of the agricultural use is forage production and animal agriculture, primarily beef and dairy cattle operations. The number of farms in Chippewa County has been steadily decreasing over the past 10 years as small farms are becoming inoperative and others are being consolidated into larger units. About 75 percent of the farmers

in the county rely on off-farm employment to supplement their farming income; in fact, a significant percentage of civilian base personnel at Kincheloe AFB are also full or part-time farmers. The 1970 land use profile for Chippewa County, Michigan is presented in the table below.

Table I-12. 1970 LAND USE PROFILE,
CHIPPEWA COUNTY
PRIMARY IMPACT AREA

<u>Use</u>	<u>Acres</u>	<u>Percent</u>
Inland Water	38,912	3.7%
Land Surface	1,017,728	96.3
Forested	766,500	75.3
Agriculture	96,495	9.5
Transportation	17,756	1.7
Recreation	18,116	1.8
Urbanization	12,518	1.2
Other	<u>106,343</u>	<u>10.5</u>
Total	1,056,640	100.0%
<u>Ownership</u>		
Total Public	428,070	42.1%
Federal	(223,898)	(22.0)
State	(203,881)	(20.0)
County and Township	(40)	(0.0)
Municipal	(251)	(0.1)
Private	394,483	38.8
Corporation	<u>195,175</u>	<u>19.1</u>
Total	1,017,728	100.0%

Source: Eastern Upper Peninsula Regional Planning and Development Commission.

HISTORICAL/ARCHAEOLOGICAL SITES

The State Office of Historic Preservation has said there are no sites of historical or archaeological significance on the base.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

The Kincheloe AFB airport area includes the airspace within a horizontal radius of five statute miles from the geographical center of the

aerodrome, extending from the ground level to 3,000 feet. Kincheloe AFB controls all aircraft using the American and Canadian Sault Ste. Marie airports in addition to base air traffic. Over 36,000 aircraft operations per year take place at the three airports, Kincheloe accounting for nearly 18,000 of these. These numbers include takeoffs, landings, low approaches, and touch-and-go maneuvers.

There are no known hazards to flight nor are any anticipated in the future. Airspace allocation is sufficient and safe to conduct and support mission requirements and satellite airports.

Kincheloe AFB generates noise due to aircraft both in the air and on the ground. Noise from engine run ups, required to perform maintenance is scheduled during the day to minimize the disturbance. Based on existing mission and operations all flight pattern attitudes and locations have been adjusted in the best interest of safety to reduce the impact of noise on communities in the vicinity of the base.

2. BLYTHEVILLE AIR FORCE BASE AREA

Blytheville Air Force Base is located in the northeastern corner of the State of Arkansas, six miles from the Missouri line and eight miles west of the Mississippi River. Memphis, Tennessee, is approximately 70 miles to the south while the Arkansas State Capital, Little Rock, lies roughly 200 miles to the southwest.

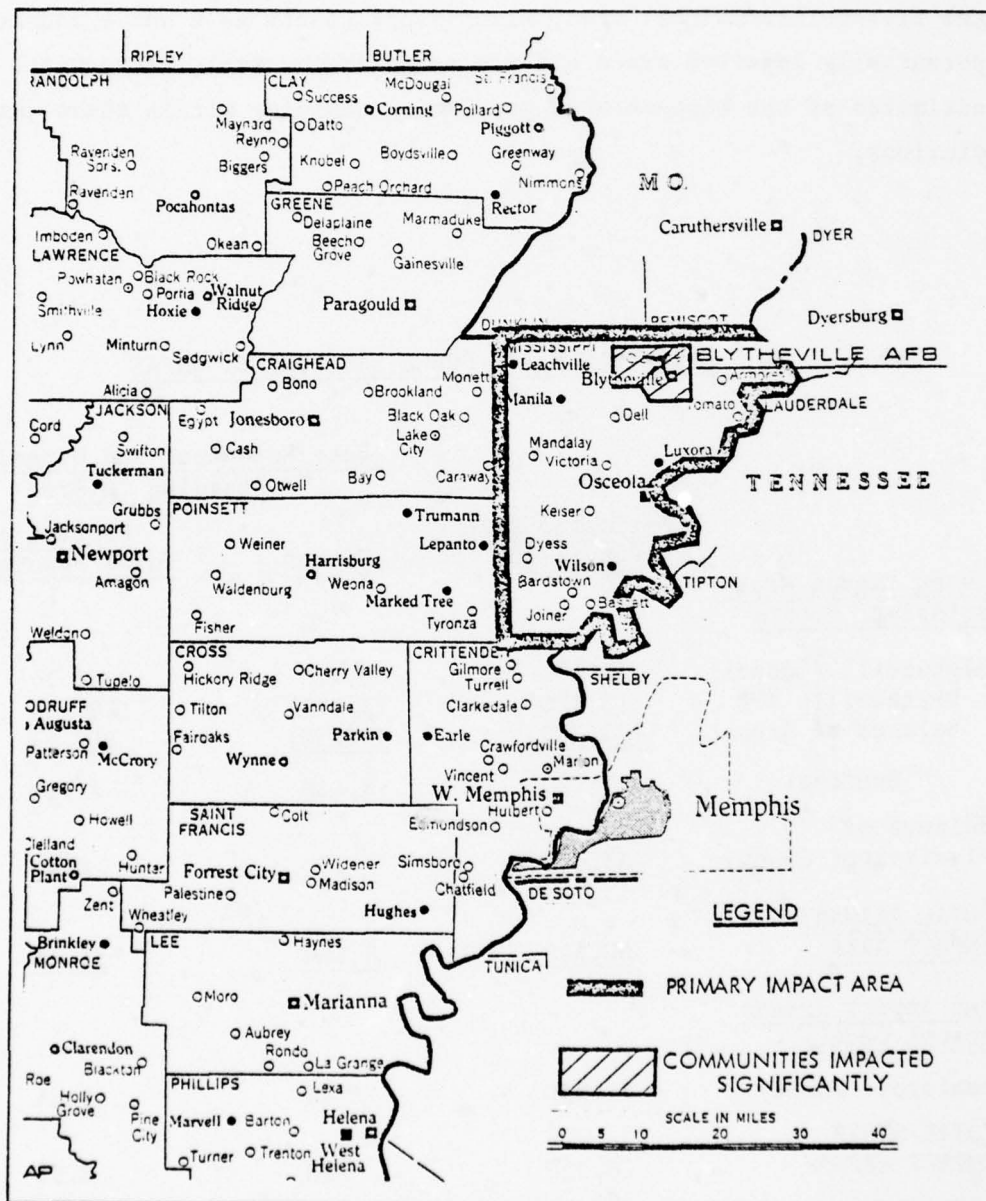
The principal highway in the area is Interstate 55 which serves as a major connecting link between New Orleans and Chicago. The base itself is located within the city of Blytheville near Interstate 55. Along with Osceola to the south, Blytheville serves as one of the twin county seats for Mississippi County. In addition to its local government and military orientation, the City of Blytheville serves as a major trade and services node for the surrounding hinterland.

Slightly less than half of the combined military and civilian personnel assigned to the base reside in base housing. Of the nearly 3,500 DAF civilian and military personnel assigned to the base on March 31, 1976, roughly 1,700 were accommodated in base housing while nearly 1,800 occupied off-base housing in the civilian community.

Based on a detailed evaluation of the residence patterns of base personnel, population center, employment nodes and commutation patterns, Mississippi County was designated as the Primary Impact Area. Nearly 99 percent of all base personnel and their dependents live within Mississippi County and this jurisdiction would bear the brunt of economic and fiscal impacts stemming from base closure. Moreover, Mississippi County has been designated as the Labor Market Area for the region in which the base is located.

REGIONAL LOCATION OF BLYTHEVILLE AFB

MISSISSIPPI COUNTY, ARKANSAS



An unusually high concentration of base personnel and their dependents live in two municipalities immediately adjacent to the base: Blytheville and Gosnell. Fully 95 percent of those living in off-base housing reside within these two communities. Population estimates for the Blytheville/Gosnell area, Mississippi County as a whole and other potentially impacted areas are presented in the table along with estimates of the base-related population residing within these jurisdictions.

Table I-13. BLYTHEVILLE AIR FORCE BASE IMPACT AREAS

		<u>Base Personnel and Dependents</u>	
		<u>Residing in Area</u>	
	<u>Estimated 1976</u>		<u>Percent of</u>
	<u>Population</u>	<u>Number</u>	<u>Total Population</u>
<u>Primary Impact Area:</u>			
<u>Mississippi County</u>			
Blytheville/Gosnell	27,100	8,420	31.1
Blytheville AFB	(3,870)	(3,870)	(100.0)
Balance of Area	<u>(23,230)</u>	<u>(4,550)</u>	<u>(19.6)</u>
Subtotal	27,100	8,420	31.1%
Balance of			
Mississippi County	33,400	130	0.4
<u>TOTAL PRIMARY</u>			
<u>IMPACT AREA</u>	<u>60,500</u>	<u>8,550</u>	<u>14.1%</u>
<u>Other Impact Areas:</u>			
<u>Pemiscot County</u>			
Pemiscot County	26,900	120	0.5%
TOTAL OTHER			
IMPACT AREAS	26,900	120	0.5%

Source: Hammer, Siler, George Associates

Because the postal zip code delivery area for both Blytheville and Gosnell is the same, it was not possible to differentiate the base-related population residing within each. As a consequence, both municipalities are treated jointly in the analysis of population and housing presented in the remainder of this report. The 4,550 base-related population residing within these two municipalities in off-base housing accounted for approximately 20 percent of the combined off-base population. When those accommodated in on-base housing are included, base personnel and their dependents account for nearly a third of the 27,100 total population.

Throughout the balance of Mississippi County, the 130 base-related persons account for less than one percent of the total population. As clearly indicated by the data, Blytheville and Gosnell would be the two most severely impacted jurisdictions within Mississippi County. While somewhat over 100 base personnel and their dependents live within the adjacent Pemiscot County portion of Missouri, they account for less than one percent of the county's total population.

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

Blytheville AFB is located in the Mississippi River Valley. The surrounding terrain is predominantly level but includes light depressions and rises. Bedrock in the area is sedimentary and made up of limestone and shale. The soils in the area range from sandy loam to clay.

WATER (AFERN 3.2)

The base and surrounding communities draw their water from the Fort Pillow Sand Aquifer. The water is of very high quality and requires only iron removal treatment.

AIR (AFERN 3.3)

Blytheville AFB is the only base of the three being considered in this Environmental Impact Statement which has an air sampling station within a ten mile radius of the base. The base presently contributes approximately five percent of the total air pollution emissions in Mississippi County.

BIOTIC ENVIRONMENT (AFERN 3.4)

The biotic environment of Blytheville AFB contains 3,092 acres of which 538 acres are covered with buildings and pavements, 624 acres are improved land, 1,210 acres are used for field crops, and 721 acres are unimproved. Overall, the area contains no unique habitat, and the population of game animals is low. Songbirds are plentiful. No threatened or endangered species of plants or animals are known to occur on the base.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1.1)

Due largely to economic expansion in the civilian sector, population in the Blytheville/Gosnell urban area continued to grow over the past decade and a half. From a 1960 level of approximately 20,800, the population in the area has increased by nearly a third to its estimated present level of 27,100. Because Blytheville/Gosnell was an urbanized area in 1960, the population of the Air Force Base was included. Population changes over the 1960-76 period for Blytheville/Gosnell, the balance of Mississippi County and Pemiscot County, Missouri, are presented in the table on the following page. Because the reporting periods over the 16 year span are not equivalent, percentage rates of change have been expressed on an average annual basis.

Table I-14. POPULATION TRENDS, BLYTHEVILLE AFB
IMPACT AREAS, 1960, 1970 AND 1976

	<u>Population</u>			<u>Average Annual</u> <u>Rate of Change</u>	
	<u>1960</u>	<u>1970</u>	<u>1976</u>	<u>1960-70</u>	<u>1970-76</u>
<u>Primary Impact Area:</u>					
<u>Mississippi County</u>					
Blytheville/Gosnell	20,797	26,138	27,100	2.3%	0.6%
Balance of County	49,377	35,922	33,400	-3.1	-1.2
<u>TOTAL PRIMARY</u> <u>IMPACT AREA</u>	<u>70,174</u>	<u>62,060</u>	<u>60,500</u>	<u>-1.2%</u>	<u>-0.4%</u>
<u>Other Impact Areas:</u>					
<u>Pemiscot County</u>					
Pemiscot County	38,095	26,373	26,900	-3.6%	0.3%
<u>TOTAL OTHER</u> <u>IMPACT AREAS</u>	<u>38,095</u>	<u>26,373</u>	<u>26,900</u>	<u>-3.6%</u>	<u>0.3%</u>

Source: U.S. Census of Population, 1960 and 1970;
and Hammer, Siler, George Associates

As illustrated, 1960-70 population growth in the Blytheville/Gosnell area contrasts sharply with population losses in the balance of Mississippi County and in Pemiscot County. Out-migration over the decade resulted in an average annual loss approximating three percent. Since 1970, these population losses have been stemmed. In Pemiscot County, total population increased slightly over the last six years while the population loss in Mississippi County slowed considerably.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

Mississippi County represents the most diverse economy of the three under study. Major economic activities in addition to Blytheville Air Force Base are significant agricultural, manufacturing and trade activities.

EMPLOYMENT (AFERN 4.2.2)

According to the Arkansas Employment Security Division, the Blytheville Labor Area (Mississippi County, Arkansas) contained approximately 21,775 jobs in March 1976. These jobs were well distributed among the Agricultural, Manufacturing, Trade, Services and Government sectors. A distribution of civilian employment in the Blytheville Primary Impact Area is presented in the following table.

Table I-15. CIVILIAN EMPLOYMENT PROFILE, BLYTHEVILLE
AFB PRIMARY IMPACT AREA, MARCH 1976

<u>Sector</u>	<u>Employment</u>	<u>Percent of Total</u>
Agriculture	2,950	13.5%
Construction	1,150	5.3
Manufacturing	6,025	27.7
T.C.U. ^{1/}	675	3.1
Trade	3,350	15.4
F.I.R.E. ^{2/}	450	2.1
Services ^{3/}	4,225	19.4
Government	<u>2,950</u>	<u>13.5</u>
Total	21,775	100.0%

^{1/} Transportation, Communications, Utilities.

^{2/} Finance, Insurance, Real Estate.

^{3/} Includes 'Other Non-Agricultural.'

Source: Research and Statistics Section, Arkansas
Employment Security Division

In addition to having a major employment concentration in the Government sector, Blytheville is characterized by strong Agricultural and Manufacturing sectors. In terms of agriculture, the Mississippi County area represents one of the largest cotton-producing and soybean-producing counties in the country. Manufacturing employment is also diverse and accounts for 27.7 percent of total employment. The

predominance of this employment is in the non-durable category and is largely related to the food processing and apparel-related industries.

As the tenth largest city in the State of Arkansas, the Blytheville area boasts of several manufacturing concerns. Among these are the Blytheville Canning Company (canned vegetables); the Randall Company (automotive and appliance aluminum and stainless trim); Myers Bakery (bakery products); Nibco (gray iron castings); Osceola Shoe (footwear); American Greetings Corporation (greeting cards, gift wrap); Crumpton Osceola (fabric); and Union Carbide, Films Packaging Division (cellulosic food casing and membranes).

Because of its economic diversity, Blytheville has recently enjoyed an unemployment rate lower than that of the nation. However, its average annual unemployment rate in 1975 of 7.2 percent remains slightly higher than the state average.

Blytheville Personnel and Payrolls

As of March 31, 1976, the Blytheville Air Force Base employed 3,447 personnel. Of this number, 2,830 were assigned military personnel and 617 were assigned FTE civilian personnel. The civilian personnel total consists of 417 Department of the Air Force Appropriated Fund Civil Service and Wage Board personnel and 200 Non-Appropriated Fund personnel. A profile of on-base employment is presented in the table on the following page.

Table I-16. ON-BASE EMPLOYMENT PROFILE,
BLYTHEVILLE AFB, MARCH 31, 1976

<u>Assigned Military</u>	<u>Number of Personnel</u>
Officers	454
Airmen	<u>2,376</u>
Subtotal	(2,830)
<u>Assigned Civilian</u>	
DAF Appropriated	417
Non-Appropriated Fund ^{1/}	<u>200</u>
Subtotal	(617)
Total	3,447

^{1/} Includes the full-time equivalent of
part-time AAFES personnel.

Source: Headquarters, United States Air Force,
Programs and Resources, Bases and Units
Division.

Civilian and military payrolls on the base represent an important component in total personal income (TPI) for the Blytheville AFB Primary Impact Area. As illustrated in the table on the following page, monthly gross payrolls during March 1976 totalled \$2,883,810. On an annual basis, Blytheville AFB payrolls amount to \$34.6 million and account for 12.3% of total personal income in Mississippi County.

Table I-17. ESTIMATED MONTHLY GROSS PAYROLL,
BLYTHEVILLE AFB, MARCH 1976

Military

Officers	\$ 706,360
Airmen	<u>1,641,200</u>
Subtotal	\$2,347,200

Civilian

DAF Appropriated	\$435,520
NAF ¹	<u>100,730</u>
Subtotal	\$536,250

Total	\$2,883,810
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Source: November 30, 1976 Leave and Earning Statement File (Adjusted), U.S. Air Force Accounting and Finance Center; and Non-appropriated Fund Financial Analysis Office, Blytheville Air Force Base.

RETAIL SALES

In 1975, the last full year for which comprehensive retail sales data is available, retail sales in Mississippi County totalled \$160.6 million. This figure does not include sales on the Air Force Base itself in the commissary, exchange and clubs. Excluding these sales, Blytheville personnel accounted for a maximum of \$10.5 million in retail sales at civilian sector establishments in the Primary Impact Area. This represents 6.5 percent of total estimated sales.

PUBLIC FINANCE (AFERN 4.3.3)

The State of Arkansas collects personnel income and sales taxes from Primary Impact Area residents. At the local level, major revenue sources include ad valorem real property taxes, federal revenue sharing and PL 81-874 funds to school districts impacted by the dependents of federal employees. A variety of other user charges, fees and fines

round out local revenue sources. The Gosnell Water Association has an outstanding balance of \$1.4 million on revenue bonds sold to finance capital improvements to the sewer system.

BASE PROCUREMENT (AFERN 4.2.4)

In Fiscal Year 1976, Blytheville AFB made approximately \$29 million in non-construction procurement purchases. Of this amount, approximately \$6.1 million or 20.9 percent of total procurements was within the Primary Impact Area. A profile of non-construction procurements made by Blytheville AFB is presented in the following table.

Table I-18. NON-CONSTRUCTION PROCUREMENTS IN THE
PRIMARY IMPACT AREA, BLYTHEVILLE AFB,
FISCAL YEAR 1976

<u>Category</u>	<u>Total Procurements</u> (000)	<u>Procurements in Primary Impact Area</u>	
		<u>Amount</u> (000)	<u>Percent</u>
Supply	\$ 1,201.3	\$ 288.3	24.0%
Commissary	6,072.0	1,457.3	24.0
Exchange	3,023.0	872.0	28.8
Civil Engineering	1,146.1	275.1	24.0
Contract Maintenance	124.4	29.8	24.0
Medical	163.8	39.3	24.0
NAFI	695.0	147.3	21.2
Miscellaneous Services	392.4	94.2	24.0
COPARS	133.0	31.9	24.0
COCESS	642.4	154.2	24.0
Travel of Persons	77.2	.7	1.0
Travel of Things	1,166.6	1,166.6	100.0
Utility and Rent	1,010.8	1,010.8	100.0
Communications	221.3	221.3	100.0
POL	12,959.7	287.5	2.2
(JP-4)	(12,672.2)	(0)	(0)
	\$29,029.0	\$6,076.3	20.9%

Source: Base Procurement, Supply, Transportation, Exchange, Accounting and Finance Office, Blytheville AFB, Arkansas.

As indicated, Blytheville AFB awarded approximately \$6.1 million in non-construction procurement purchases to Primary Impact Area firms. In terms of absolute amounts, commissary purchases represent the largest single category of sales. Most of these procurements consist of purchases made from local food wholesalers. Relatively, the T.C.U. sector attracts the largest aggregate amount of procurements within the "utility," "travel of persons" and "travel of things" categories accounting for approximately \$1.5 million in total procurements.

Because the duration of construction contracts quite frequently extends over a multi-year period, it is helpful to examine construction awards on an annual average basis. The following table presents annual construction contracts by the area to which they were awarded for the period from FY 1972 to FY 1976.

Table I-19. ANNUAL CONSTRUCTION AWARDS IN THE PRIMARY IMPACT AREA, BLYTHEVILLE AFB, FISCAL YEARS 1972-1976

<u>Fiscal Year</u>	<u>Total Construction Awards</u>	<u>Construction Awards In Primary Impact Area</u>
1972	\$1,028,048	\$ 717,787
1973	912,900	147,150
1974	3,034,200	706,800
1975	1,743,203	1,513,153
1976	537,200	400,000
Annual Average	1,450,910	697,058

Source: End of Year Budget Obligation Ledger and Base Procurement Officer, Blytheville AFB, Arkansas.

HOUSING (AFERN 4.2.5)

The housing market in Mississippi County is dominated by families and individuals permanently residing in the area. A relatively small

portion of the units is devoted to seasonal use or occasional vacation/ second home occupancy. To ensure consistency in analysis, however, only those units available for sale or rent have been counted as vacant and computed in the vacancy rate to indicate market conditions.

On the assumption that most year-round units vacant at the time of the April Census but not available for sale or rent represented vacation and second homes, these have been grouped with seasonal units and treated as a market separate from that serving the local population base. The resulting portrayal of the 1970 housing stock within Mississippi County is presented in the table below.

Table I-20. 1970 HOUSING STOCK CHARACTERISTICS
IN THE BLYTHEVILLE AFB PRIMARY
IMPACT AREA

	<u>Blytheville/ Gosnell</u>	<u>Balance of Mississippi County</u>	<u>Total Primary Impact Area</u>
<u>Total Housing Units</u>	8,318	11,500	19,818
Seasonal Units	3	164	167
Vacation/Second Homes	171	677	848
Subtotal	<u>174</u>	<u>841</u>	<u>1,015</u>
Percent of Total Stock	2.1%	7.3%	5.1%
<u>Units Intended for Year Round Occupancy</u>	8,144	10,659	18,803
Occupied Year Round Units	7,827	10,465	18,292
Owner-Occupied	(53.9%)	(44.4%)	(48.5%)
Renter-Occupied	(46.1%)	(55.6%)	(51.1%)
Vacant Units for Sale or Rent	317	194	511
Market Vacancy Rate	3.9%	1.8%	2.7%

Source: U.S. Census of Housing, 1970.

Of the nearly 20,000 housing units within Mississippi County, only 5 percent were seasonal units and those intended for occasional vacation

or second home use. Of the remaining 18,803 units intended for permanent year-round occupancy, slightly over 500 were available for sale or rent. The market vacancy rate within the county as a whole, then, was only 2.7 percent, a rate which indicated an equilibrium market. In the Blytheville/Gosnell area, the market vacancy rate was only slightly higher than the county-wide average but at 3.9 percent was well within normal tolerance levels.

Since 1970, it is estimated that the number of housing units intended for year-round occupancy in Mississippi County increased slightly less than 10 percent. Overall vacancy rates within the county have changed little since 1970 and are estimated to be in the three to four percent range, well within market tolerance levels. These 1976 baseline conditions are depicted in the table below.

Table I-21. ESTIMATED 1976 HOUSING MARKET BASELINE,
BLYTHEVILLE AFB PRIMARY IMPACT AREA

	<u>Blytheville/ Gosnell</u>	<u>Balance of Mississippi County</u>	<u>Total Primary Impact Area</u>
Units Intended for Year Round Occupancy	8,538	11,966	20,504
Occupied	8,202	11,607	19,812
Vacant for Sale or Rent	333	359	692
Market Vacancy Rate	3.9%	3.0%	3.4%

Source: Hammer, Siler, George Associates

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

The major political jurisdictions surrounding Blytheville AFB are those of Blytheville and Gosnell. Both of these governments function under the mayor-council form of government. The base and the surrounding communities are located within the Chickasauga District of Mississippi County. Regional matters are addressed by the Ozark Regional Planning District. Also, federal regions of HUD, EPA, VA, FAA and the A-95 Clearinghouse provide regional frameworks within which local communities operate.

EDUCATION (AFERN 4.3.3)

Two school districts in Mississippi County serve the public school students from Blytheville AFB-related households: the Gosnell School District, which includes the base itself; and the Blytheville School District. These two districts enroll the students from 97 percent of Blytheville AFB related households.

Blytheville AFB dependents represent 1,421 students, or 19.6 percent of the total 7,242 students enrolled in the two school districts. Of the two, Gosnell contains 80 percent of base-related students. The remaining Blytheville AFB dependents not attending either of these two school districts are distributed in numerous communities throughout Arkansas, Missouri and Tennessee.

Table I-22. BLYTHEVILLE AFB DEPENDENTS ENROLLED IN
PRIMARY IMPACT AREA SCHOOL DISTRICTS

<u>School District</u>	<u>1975-76 Total Membership</u>	<u>Total AFB Dependents</u>	<u>Percent of Total Membership</u>
Gosnell	1,673	1,142	68.3%
Blytheville	5,569	279	5.0
Total	7,242	1,421	19.6%

Source: Office of Education, U.S. Department of Health, Education and Welfare; Superintendent of Blytheville Public Schools; and Hammer, Siler, George Associates

Currently, there are two institutions of higher learning in Mississippi County, Arkansas. Both the Cotton Boll Vocational-Technical Institute and the Mississippi County Community College (MCCC) provide and receive valuable support from base-related personnel. For instance, Mississippi County Community College, founded in 1975, is still in an active development role and relies heavily upon base resources. In addition to drawing upon the base for students, instructors and supporting staff, MCCC has plans to initiate a nursing program with help from the base Hospital.

There are also several programs of higher education located on the base itself. These programs range from a branch of the Arkansas State University Graduate School to a program by the Oklahoma State University for FCC license applicants. These programs serve approximately 800 military and civilian personnel.

MEDICAL (AFERN 4.3.4)

Blytheville area civilian community hospitals presently contain approximately 220 beds. This capacity is being supplemented by a net addition of 170 beds. Upon completion of the 220-bed expansion at Chickasauga Hospital, the 50-bed Doctor's Hospital will be closed.

On-base medical facilities consist of a 20-bed hospital with expansion capability to 40 beds. In addition, there is a 10-chair dental clinic.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

The Base Security Police have informal agreements with the Arkansas and Missouri Sheriff's Departments, the Arkansas and Missouri State Police, and the City of Blytheville Police Department. In the area of fire protection, the base fire department has a formal mutual aid agreement with the Blytheville and Gosnell Fire Departments.

In addition to such informal service agreements, the personnel and their dependents of Blytheville AFB play an active role in the cultural and civic endeavors of surrounding communities.

Within the immediate Blytheville/Gosnell area there are four financial institutions. They are the Farmers Bank and Trust Company, First National Bank, the Blytheville Federal Savings and Loan, and the Blytheville Federal Credit Union. Together, these financial institutions represent approximately \$110 million in total assets. It is estimated that the military personnel of Blytheville AFB alone have approximately \$11.3 million in deposits and \$11.4 million in outstanding loan balances at these institutions.

There are estimated to be several hundred military retirees from all the services residing in Mississippi County at the present time who directly utilize base facilities. In addition, many other military retirees who live outside of Mississippi County also make use of the facilities at Blytheville Air Force Base on a regular basis. These retirees and their dependents are authorized to use the commissary, the exchange and the medical facilities at the base, and they have access to many of the administrative services and recreational facilities as well.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

Blytheville AFB uses Memphis Metropolitan Airport for nearly 100 percent of its passenger service. The airport is about 75 miles from the base, requiring a driving time of about 1 hour and 30 minutes. Blytheville AFB generates approximately \$77,000 annually in passenger revenue at Memphis Metropolitan Airport.

Blytheville AFB has a defense rail switch which connects with the St. Louis Southwestern Railroad at Stringer, Arkansas. The base occasionally utilizes this system to move a mobile aircraft simulator.

Blytheville AFB is served by two major highways, Interstate 55 and U.S. Highway 61. In addition, the minor roadways of Arkansas Highway 18 and several Mississippi County roads serve the area.

Part of Arkansas Highway 18 between U.S. Highway 61 in Blytheville and Interstate Highway 55 south and east of the city is presently a problem area. The Arkansas State Highway Department estimates the present vehicle per day (VPD) rate at 9,469, which is already within the 1988 highway use projection range for this section of road. The City of Blytheville has a current plan to improve the access but as yet no construction has begun.

A bridge has been constructed across the Mississippi River south of Caruthersville, Missouri and was opened on December 1, 1976 with a dedication by the Governors of Missouri and Tennessee. Construction of roadways connecting the bridge, which is considered part of Interstate 155, to Interstate 55 in Missouri and U.S. Highway 51 in Tennessee is also in progress.

Blytheville AFB processed approximately 1,300 shipments of household goods in 1976 at an estimated cost of \$1,099,781. These shipments were handled locally by 10 moving and storage agents representing 64 nationwide moving companies. The base generates at least 75 percent of the business of these 10 agents. In addition, truck lines were used to ship \$66,812 worth of freight in 1976.

There are no commuter bus lines to or from the base but a Greyhound Bus Line connecting Memphis, Tennessee, and St. Louis, Missouri, goes through Blytheville, Arkansas. Base personnel use this line for about 90 trips annually to the Memphis airport with a total expenditure of \$675.

There are approximately 1,350 cars and trucks used by off-base military and civilian personnel traveling daily to the base. During the peak traffic periods (8 to 9 a.m. and 5 to 6 p.m.) between 750 and 1,000 vehicles pass through the two main gates of Blytheville AFB. The base contributes about 30 percent of the total traffic volume in the area during these periods. During the remainder of the day the base is responsible for approximately 15 percent of the area's total traffic volume due to travel by personnel and their dependents for shopping, school and recreational purposes. Currently 227 people commute to the base from outside the Blytheville/Gosnell Planning area.

UTILITIES (AFERN 4.4.2)

Blytheville AFB has its own water supply, treatment and distribution system as well as its own wastewater collection and treatment system. Both Blytheville and Gosnell have their own water and sewer utilities.

The Arkansas-Missouri Power Company provides electrical and natural gas utilities. In addition, it provides heating and cooking fuel.

In relationship to fuel oil procurements by the base, the Blytheville River Rail Terminal Company has invested in excess of \$420,000 in facilities to ship fuel oil from the Mississippi River to Blytheville AFB.

On-base residential and administrative service lines are provided by the Southwestern Bell Telephone Company. Base personnel residing off-base constitute an estimated additional 1,334 subscribers.

All solid waste generated on-base is disposed of in a base sanitary landfill. Households of personnel residing off-base generate an estimated 10.6 acre-feet of solid waste annually. Each municipality in the area has its own collection and disposal system, primarily incineration or landfill. Many landfills do not comply with EPA requirements in this area.

LAND USE (AFERN 4.4.3)

Land use in Mississippi County is characterized as follows: cropland, 88 percent; pasture land, 1 percent; forest land, 8 percent; and urban and built-up land, 3 percent. The county is basically agricultural, with primary dependence on row crops. Blytheville is basically a commercial market for the intensive farming country which surrounds it. In this county as in many other rural areas, the number of farms has been decreasing over the last 10 years while the average size per farm has been increasing. At the same time farming operations are becoming more mechanized and the demand for farm labor has been gradually declining.

Blytheville AFB is located in the northern part of Mississippi County. A close relationship exists between the base and the Blytheville/Gosnell Planning Area. Interstate Highway 55 passes to the east of the city, and U.S. Highway 61 traverses the planning area in a north-south direction. According to the most recent land use profile,

residential uses absorb about 48 percent of all developed land in the planning area, with practically all of this development in single-family structures. Commercial use constitutes about 6 percent of total urban use and most of this is commercial use (e.g., service stations, motels, drive-in food outlets, and automotive dealers). Industrial use absorbs about 8 percent and public use and transportation facilities comprise the remaining 38 percent of urban land use. Non-urban lands in agriculture and open space occupy a proportionate acreage to the developed lands within the Blytheville-Gosnell Planning Area.

HISTORICAL/ARCHAEOLOGICAL SITES (AFERN 4.4.3.7.3)

There are no sites of historical or archaeological significance on the base.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Blytheville AFB has established Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) approaches, departures and traffic patterns which are compatible with the types of aircraft transiting and assigned to the base. The terminal area includes the airspace within a horizontal radius of five statute miles from the geographic center of the aerodrome, extending from the ground level to 3,000 feet. Jonesboro Municipal Airport, approximately 47 miles from Blytheville AFB, is the nearest airport; therefore, the air traffic of the two fields does not conflict.

An appreciable amount of low altitude, sightseeing, light aircraft flying occurs in the Blytheville AFB vicinity. There are no natural hazards in the air space surrounding the base.

Blytheville AFB generates noise due to aircraft both in the air and on the ground. Noise from engine run ups, required to perform maintenance,

is scheduled during the day to minimize the disturbance. Flight operations and possible alternatives were studied to reduce the noise and safety hazards. The current operations represent the most satisfactory alternative.

3. WURTSMITH AIR FORCE BASE AREA

Wurtsmith Air Force Base is located near the shores of Lake Huron in the mainland portion of the State of Michigan. It lies in a largely rural area approximately 20 miles north of the twin cities of Tawas and East Tawas.

The principal highway through the area is U.S. 23 which parallels the shoreline of Lake Huron. The base itself is located near U.S. 23 in Oscoda Township in the northeastern portion of Iosco County. Of the 3,839 total civilian and military personnel assigned to the base on March 31, 1976, somewhat less than 60 percent were accommodated in on-base housing while approximately 1,600 resided within surrounding communities.

Based on a detailed evaluation of the residence patterns among base personnel, population centers, employment nodes and commutation patterns, Iosco County was designated as the Primary Impact Area. Over 90 percent of all base personnel and their dependents reside within Iosco County and this jurisdiction would bear the brunt of economic and fiscal impacts stemming from base closure. While adjacent Alcona County is also included in the two-county Labor Market Area, Iosco County itself accounts for 75 percent of total employment. While base closure impacts would undoubtedly be felt in Alcona County as well, Iosco County is the principal focus for the analysis which follows.

With an estimated 1976 population of 30,800 in Iosco County, base personnel and their dependents accounted for 30.9 percent of the population total. Base-related population, however, is concentrated primarily in Oscoda and Au Sable townships. Population estimates and base-related concentrations for Iosco County, its principally impacted civil divisions and those in adjacent Alcona County are presented in the table on the following page.

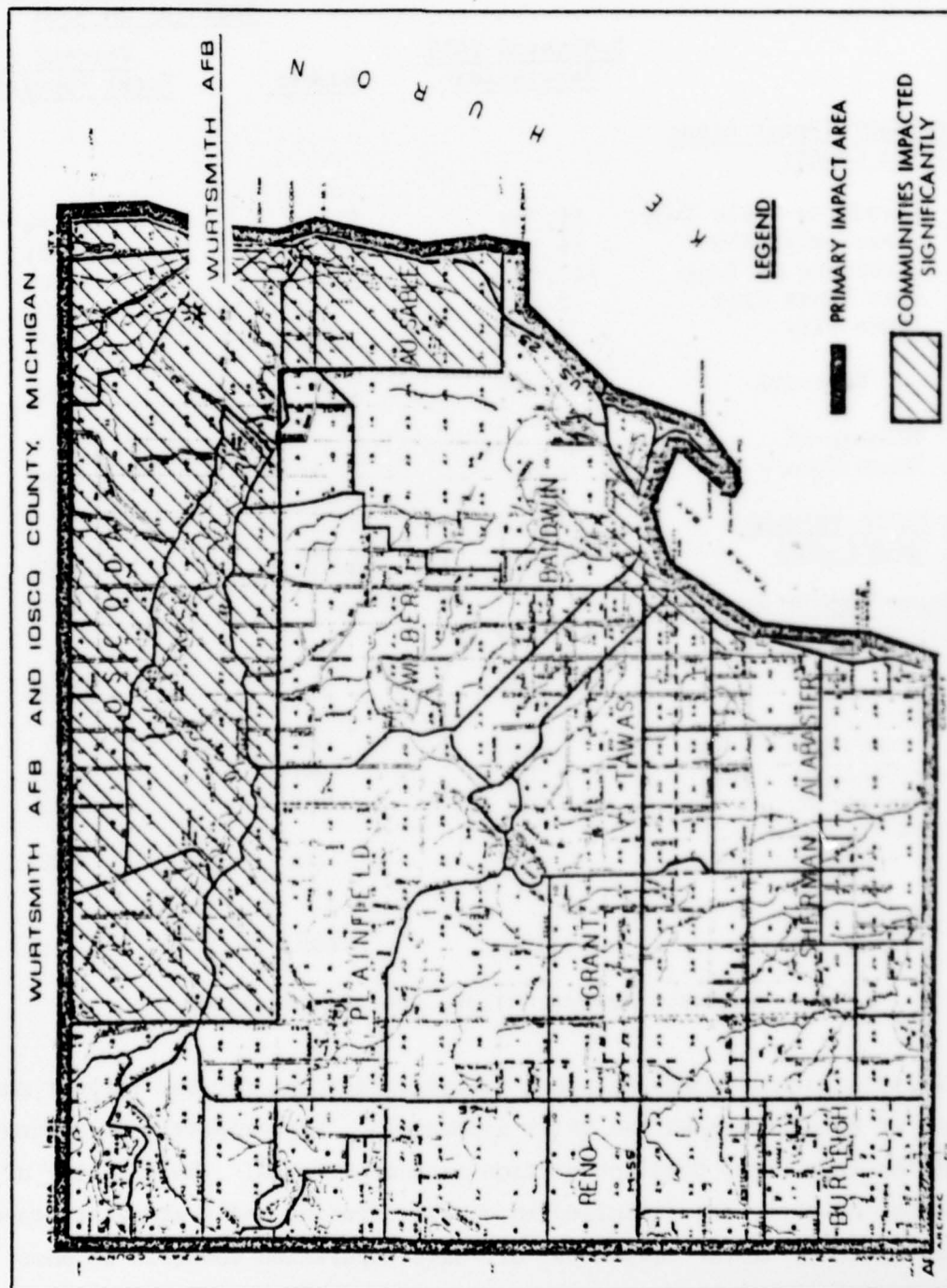


Table I-23. WURTSMITH AIR FORCE BASE IMPACT AREAS

		<u>Base Personnel and Dependents</u>	
		<u>Residing in Area</u>	
	<u>Estimated 1976</u>	<u>Number</u>	<u>Percent of</u>
	<u>Population</u>		<u>Total Population</u>
<u>Primary Impact Area:</u>			
<u>Iosco County</u>			
Oscoda/Au Sable Twps.	16,750	9,160	54.7%
Wurtsmith AFB	(5,660)	(5,660)	(100.0)
Balance of Twps.	(11,090)	(3,500)	(31.6)
East Tawas City	2,850	170	6.0
Tawas City	<u>2,050</u>	<u>140</u>	<u>6.8</u>
Subtotal	21,650	9,470	43.8
Balance of			
Iosco County	9,150	30	0.3
<u>TOTAL PRIMARY</u>			
<u>IMPACT AREA</u>	<u>30,800</u>	<u>9,500</u>	<u>30.9%</u>
<u>Other Impact Areas:</u>			
<u>Alcona County</u>			
Greenbush Twp.	1,000	270	27.0%
Harrisville/			
Harrisville Twp.	1,900	160	8.4
Lincoln Village	500	90	18.0
Mikado Twp.	900	140	15.6
Balance of			
Alcona County	5,420	30	0.6
<u>TOTAL OTHER</u>			
<u>IMPACT AREAS</u>	<u>9,720</u>	<u>690</u>	<u>7.1%</u>

Source: Hammer, Siler, George Associates

As illustrated, Oscoda/Au Sable townships account for the largest number of base personnel and their dependents: approximately 50 percent of the townships' total population is base-related. The majority of these, however, are domiciled in on-base housing and a somewhat lesser 31.6 percent of the townships' off-base population consists of base personnel and their dependents.

In the twin cities of Tawas and East Tawas, base-related population is less than 200 each but these nonetheless account for six to seven percent of these cities' total. Apart from these major civil divisions within Iosco County, only 30 base personnel and their dependents reside in other portions of the county; these account for only 0.3 percent of the total population.

Reflecting its location close to the county boundary, Wurtsmith AFB has a somewhat lesser but still strong influence on adjoining portions of Alcona County. As illustrated in the table, Greenbush Township is populated by approximately 270 base personnel and their dependents; they account for 27 percent of the 1,000 persons residing in that township. Though their numbers are small, base-related populations account for 8 to 18 percent of the total in three other civil divisions of Alcona County.

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

Wurtsmith AFB is located on a nearly level sand plain. The airfield is surrounded by weathered second growth timber including Jack Pine, Small Oaks, and Aspen. Lake Van Etten, an inland lake extending in a north-easterly direction, lies adjacent to the base.

WATER (AFERN 3.2)

The airfield and surrounding region obtain drinking water from an aquifer that has no impervious layer between it and the surface. There is an ample supply of adequate quality water for present and projected regional needs.

AIR (AFERN 3.3)

Due to the remote location of the base there is no air emission inventory for the surrounding region. Air pollution is not a problem in the region surrounding the base.

BIOTIC ENVIRONMENT (AFERN 3.4)

Wurtsmith AFB has 2,433 acres of natural vegetation considered to be unimproved grounds. This includes grasslands and forest area. Forest areas (totaling 289 acres) located on Wurtsmith AFB consist primarily of Jack Pines ranging from 25-30 years old, White Pine, Norway Pine, Oak and Maple. There are no threatened or endangered species on Wurtsmith AFB.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1)

Early in the 1960's, a Strategic Air Command bombardment wing and supporting units took over Wurtsmith Air Force Base; this transfer of personnel and their dependents increased the total population living in the two townships. Apart from this base-related population impact, other portions of the county remained virtually stable or declined somewhat in population. Population changes over the 1960-70 decade and estimates for 1976 are presented in the table below. Because the reporting periods over the 16-year span are not equivalent, percentage rates of change have been expressed on an average annual basis.

Table I-24. POPULATION TRENDS, WURTSMITH AIR FORCE
BASE IMPACT AREAS, 1960, 1970 AND 1976

	<u>Population</u>			<u>Average Annual Rate of Change</u>	
	<u>1960</u>	<u>1970</u>	<u>1976</u>	<u>1960-70</u>	<u>1970-76</u>
<u>Primary Impact Area:</u>					
<u>Iosco County</u>					
Oscoda/Au Sable Twps.	5,861	13,634	16,750	8.8%	3.5%
East Tawas City	2,462	2,372	2,850	-0.4	3.1
Tawas City	1,810	1,666	2,050	-0.8	3.5
Subtotal	10,133	17,672	21,650	5.7	4.0
Balance of Iosco County	6,372	7,233	9,150	1.3	4.0
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>16,505</u>	<u>24,905</u>	<u>30,800</u>	<u>4.2%</u>	<u>3.6%</u>
<u>Other Impact Areas:</u>					
<u>Alcona County</u>					
Greenbush Twp.	536	760	1,000	3.6%	4.7%
Harrisville/ Harrisville Twp.	1,274	1,443	1,900	1.3	4.7
Lincoln Village	441	371	500	1.7	5.0
Mikado Twp.	617	636	900	0.3	6.0
Balance of Alcona County	3,484	3,903	5,420	1.1	5.6
<u>TOTAL OTHER IMPACT AREAS</u>	<u>6,352</u>	<u>7,113</u>	<u>9,720</u>	<u>1.1%</u>	<u>5.3%</u>

Source: U.S. Census of Population, 1960
and 1970; and Hammer, Siler,
George Associates

Since the Air Force base population was not included in the 1960 Census, population growth in Oscoda/Au Sable over the succeeding decade is grossly overstated in the table above: the bulk of the reported population growth is simply attributable to inclusion of Wurtsmith AFB population in the 1970 counts. The non-base population did, however, increase approximately

15 percent between 1960 and 1970. Both East Tawas and Tawas cities declined slightly in population over the decade. If the Air Force base population is excluded from the 1970 counts to provide comparability with 1960 data, the off-base population in the county increased 8.9 percent over the decade.

While expansion at Wurtsmith was the principal impetus for population growth during the 1960's, recreation, tourism, second home and retirement aspects of the civilian sector have sustained population growth throughout the area during the 1970's. As the preceding table shows, both Iosco and Alcona counties as well as their minor civil divisions grew in population on the order of three to six percent per year.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

The growth of Iosco County began with fishing settlements along the shores of Lake Huron and Saginaw Bay. The manufacturing of lumber soon sprang up along the Au Sable River and, with the addition of rail lines in the 1850's, became the major industry of Iosco County. The only other industry to contribute significantly to the county's economic base before the 1920's was the quarrying of gypsum.

The two largest communities in the county, Oscoda and Au Sable, were destroyed by fire in 1911. Even today, there is very little industry of any kind in the county. The primary source of income is the tourism and recreation industry related to Lake Huron, Saginaw Bay and the Au Sable River focused around both Tawas and Au Sable. Wurtsmith Air Force Base is the major employer of the county's population.

EMPLOYMENT (AFERN 4.2.2)

It is estimated that the March 1976 resident civilian labor force in Iosco County consisted of 8,425 persons. It is estimated that the annual average unemployment rate in Iosco County was 11.9 percent

during 1975. This unemployment rate was nearly 50 percent higher than the national average of 8.1 percent. According to the Michigan Employment Security Commission, total civilian employment was approximately 7,425. Of this amount, the largest sector was government employment with 2,425 employees. Many of these employees are directly related to the presence of Wurtsmith Air Force Base. In addition, both trade and services represent significant sectors of total employment. These employment sectors have also developed largely in response to the presence of the base. The civilian employment profile is presented in the following table.

Table I-25. CIVILIAN EMPLOYMENT PROFILE, WURTSMITH AFB PRIMARY IMPACT AREA, MARCH 1976

<u>Sector</u>	<u>Employment</u>	<u>Percent of Total</u>
Agriculture	300	4.0%
Construction	360	4.9
Manufacturing	740	9.9
T.C.U. ^{1/}	500	6.8
Trade	1,750	23.6
F.I.R.E. ^{2/}	200	2.7
Services	1,150	15.5
Government	<u>2,425</u>	<u>32.6</u>
Total	7,425	100.0%

^{1/} Transportation, Communications, Utilities

^{2/} Finance, Insurance, Real Estate

Source: Michigan Employment Security Commission

Wurtsmith Personnel and Payrolls

As of March 31, 1976, there were a total of 3,839 civilian and military personnel employed at Wurtsmith Air Force Base. Of this number, 3,103 were assigned military personnel and 736 were assigned FTE civilian personnel. Of the assigned civilian personnel, 554 were Department of the Air Force Appropriated Fund, Civil Service and Wage Board employees;

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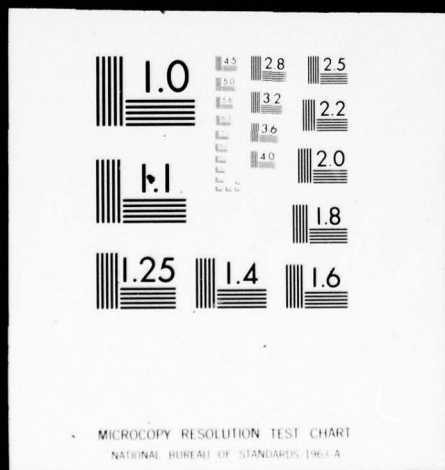
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the remainder were Non-Appropriated Fund (NAF) and Army-Air Force Exchange Service (AAFES) employees. The on-base employment profile for Wurtsmith Air Force Base is presented in the following table.

Table I-26. ON-BASE EMPLOYMENT PROFILE,
WURTSMITH AFB, MARCH 1976

	<u>Number of Personnel</u>
<u>Assigned Military</u>	
Officers	462
Airmen	<u>2,641</u>
Subtotal	(3,103)
<u>Assigned Civilian</u>	
DAF Appropriated	554
Non-Appropriated Fund ^{1/}	<u>182</u>
Subtotal	(736)
Total	3,839

^{1/} Includes the full-time equivalent for part-time AAFES personnel.

Source: Headquarters, United States Air Force,
Programs and Resources, Bases and Units
Division

Civilian and military payrolls on the base represent an important component in total personal income (TPI) for the Iosco County Primary Impact Area. As illustrated in the table below, monthly gross payrolls during March 1976 totalled \$3,041,790. On an annual basis, Wurtsmith AFB payrolls amount to \$36.5 million and account for approximately 26 percent of total personal income in the Primary Impact Area.

Table I-27. ESTIMATED GROSS MONTHLY PAYROLL,
WURTSMITH AFB, MARCH 1976

	<u>Amount</u>
<u>Military</u>	
Officers	\$ 688,800
Airmen	<u>1,718,200</u>
Subtotal	(\$2,407,000)
<u>Civilian</u>	
DAF Appropriated	\$557,970
Non-appropriated Fund	<u>76,820</u>
Subtotal	(\$634,790)
Total	\$3,041,790

Source: November 30, 1976, Leave and Earning Statement File, U.S. Air Force Accounting and Finance Center; Non-Appropriated Fund Financial Analysis Office, Wurtsmith Air Force Base

RETAIL SALES

In 1975, retail sales in Iosco County are estimated to have totalled \$71.9 million. This figure does not include sales on the Air Force Base itself in the commissary, exchange and clubs. Apart from such on-base spending, Wurtsmith personnel accounted for a maximum of \$8.4 million in retail sales at Primary Impact Area establishments in the civilian sector or 11.7 percent of total reported sales.

PUBLIC FINANCE (AFERN 4.2.3)

The State of Michigan collects personal income and sales taxes from Primary Impact Area residents; Iosco County itself, however, does not assess income or sales taxes. At the local level, major revenue sources include ad valorem real property taxes, federal revenue sharing as well

as PL 81-874 funds to school districts impacted by the dependents of federal employees. A miscellany of other user charges, fees and fines round out local revenue sources.

Capital improvements programs totalling \$7,928,000 are planned for the Primary Impact Area. Most of these improvements are programmed for 1976 completion; however, nearly \$2,900,000 in improvements have no set completion data. These programs include water and sewer repairs and extensions, development of an industrial park and a recreation area and expansion of the Iosco Airport.

BASE PROCUREMENT (AFERN 4.2.4)

In Fiscal Year 1976, Wurtsmith AFB made approximately \$28.6 million in non-construction procurement purchases. Of this amount, \$6.2 million or 21.7 percent was purchased within Iosco County, Michigan. A profile of non-construction base procurements is presented in the following table.

Table I-28. NON-CONSTRUCTION PROCUREMENTS IN THE PRIMARY IMPACT AREA, WURTSMITH AFB, FISCAL YEAR 1976

Category	Total Procurements (000)	Procurements In Primary Impact Area	
		Amount (000)	Percent
Supply	\$ 862.2	\$ 112.1	13.0%
Commissary	3,889.6	2,722.7	70.0
Exchange	4,435.5	184.1	4.0
Civil Engineering	307.5	76.9	25.0
Contract Maintenance	90.1	45.1	50.0
Medical	121.0	15.7	13.0
NAFI	733.0	293.2	40.0
Miscellaneous Services	535.6	133.9	25.0
COPARS	600.0	300.0	50.0
COCESS			
Travel of Persons	108.0	0	0
Travel of Things	1,332.5	383.8	29.0
Utility and Rent	1,129.2	1,129.2	100.0
Communications	182.1	0	0
POL	13,800.2	744.2	5.0
Other	458.3	59.6	13.0
Total	\$28,584.8	\$6,200.5	21.7%

Source: Base Procurement, Supply, Transportation, Exchange,
Accounting and Finance Office, Wurtsmith AFB, Michigan

In terms of magnitude, procurements made by the base commissary constitute the biggest local expenditure. The majority of these procurements are made at the several food distribution establishments within the region. In addition, the nearby communities of Alpena and Bay City also provide a substantial amount of commissary procurements.

Because construction contracts are quite frequently awarded over a period of several years, it is helpful to examine the annual average level of construction awards. This provides the most accurate measure of construction procurement impacts on the local economy. As illustrated in the table below, annual construction awards in the Primary Impact Area averaged approximately \$600,000 per year over the past seven fiscal years.

Table I-29. ANNUAL CONSTRUCTION AWARDS IN THE PRIMARY
IMPACT AREA, WURTSMITH AFB, FISCAL YEARS
1970-76

<u>Fiscal Year</u>	<u>Total Construction Awards (000)</u>	<u>Construction Awards In Primary Impact Area (000)</u>
1970	\$1,374.6	\$ 508.6
1971	1,018.5	203.7
1972	1,695.6	305.2
1973	2,574.6	1,364.5
1974	1,142.0	239.8
1975	4,853.1	924.4
1976	1,904.9	865.2
Annual Average	\$2,080.5	\$ 603.3

Source: Base Procurement Office, Wurtsmith AFB,
Michigan

HOUSING (AFERN 4.2.5)

The housing stock in Iosco County has several market dimensions. The majority of the stock consists of year-round units occupied by families permanently residing in the area. Hunting cottages and other seasonal units that are not winterized and intended only for intermittent use comprise another market segment. In addition, downstate Michigan residents have built and bought homes meeting year-round construction standards intended for vacation use and/or eventual retirement rather than permanent occupancy.

Because of the large number of seasonal and vacation homes built to year-round standards, use of standard Census vacancy measures distorts true market conditions. Vacant vacation homes built to year-round standards are counted with all other vacant units intended for permanent occupancy even though they have no adverse implications for the market. To compensate for this distortion, the housing stock has been evaluated in purely market terms.

Only those vacant units available for sale or rent have been computed in the vacancy rate to indicate true market conditions. On the assumption that most year-round units vacant at the time of the April census but not available for sale or rent represent vacation and second homes, these have been grouped with seasonal units and treated as a market separate from that serving the local population base. The results of these adjustments and portrayal of the 1970 housing stock within Iosco County are presented in the table below.

Table I-30. 1970 HOUSING STOCK CHARACTERISTICS IN THE WURTSMITH AIR FORCE BASE PRIMARY IMPACT AREA

	<u>East Tawas City</u>	<u>Tawas City</u>	<u>Balance of Iosco County</u>	<u>Total Primary Impact Area</u>
<u>Total Housing Units</u>	1,056	678	12,203	13,937
Seasonal Units	1	32	3,163	3,196
Vacation/ Second Homes	<u>217</u>	<u>44</u>	<u>2,807</u>	<u>3,068</u>
Subtotal	218	76	5,970	6,264
Percent of Total Stock	20.5%	11.2%	48.9%	45.0%
<u>Units Intended for Year Round Occupancy</u>	838	602	6,233	7,673
Occupied Year Round Units	808	589	5,930	7,327
Owner-Occupied	(83.1%)	(78.1%)	(61.1%)	(64.9%)
Renter-Occupied	(16.9%)	(21.9%)	(38.9%)	(35.1%)
Vacant Units for Sale or Rent	30	13	303	346
Market Vacancy Rate	3.6%	2.2%	4.9%	4.5%

Source: U.S. Census of Housing, 1970

Of the 14,000 housing units within Iosco County, nearly half were seasonal units and those intended for occasional vacation or second

home use. Of the remaining 7,673 units intended for permanent year-round occupancy, only 346 were available for sale or rent. The market vacancy rate within the county as a whole, then, was only 4.5 percent, a rate well within normal tolerance levels.

Although the composition of the housing stock was somewhat different in the cities of Tawas and East Tawas -- only 10 to 20 percent of the units were intended for seasonal or vacation use -- vacant units for sale or rent represented a market vacancy rate on the order of two to four percent. Throughout Iosco County, then, market vacancy rates were at or below the five percent mark and were closely in keeping with normal market ranges.

Since 1970, it is estimated that the number of housing units intended for year-round occupancy in Iosco County increased approximately 20 percent. Based on the insights and comments of local real estate brokers, vacancy rates have changed little since 1970 and are estimated to be in the two to five percent range, well within market tolerance levels. These baseline conditions are depicted in the table below.

Table I-31. ESTIMATED 1976 HOUSING MARKET
BASELINE, WURTSMITH AFB
PRIMARY IMPACT AREA

	<u>East Tawas</u>	<u>Tawas</u>	<u>Balance of Iosco County</u>	<u>Total Primary Impact Area</u>
Units Intended for Year-Round Occupancy	1,035	655	7,583	9,273
Occupied	998	641	7,242	8,881
Vacant for Sale or Rent	37	14	341	392
Market Vacancy Rate	3.6%	2.1%	4.5%	4.5%

Source: Hammer, Siler, George Associates

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

The nearest local government is the Oscoda Township Council, a chartered Township administered by a supervisor and board of four trustees. Other jurisdictions and their forms of government are: Alabaster, Au Sable, Baldwin, Burleigh, Grant, Plainfield, Reno, Tawas, and Wilber Townships; Iosco County (Board of Commissioners); East Tawas City (Mayor); Tawas City (Mayor); and Whittemore (Mayor).

The local communities, i.e., Oscoda, Tawas, East Tawas, Hale, Whittemore, Au Sable, etc., while politically autonomous, are administered by districts under the County Board of Commissioners.

The zoning ordinances of Oscoda and Au Sable were established and adopted jointly on October 5, 1964, in accordance with Act 184 of the Michigan Public Acts of 1934 as amended. This zoning ordinance contains 27 articles. These articles define various types of districts, and limit the type and size of buildings and structures which can be built in each district. A Township Zoning Board has been established to carry out the provisions of the ordinance, as well as a Board of Appeals to hear appellate grievances. No ordinances have been passed concerning land use, noise, or environmental problems.

EDUCATION (AFERN 4.3.3)

Iosco County contains four separate school districts with an enrollment of 8,035 students. Two of these school districts -- Oscoda Area Schools, which serves the base itself, and Tawas Area Schools -- serve the students from 93 percent of the Wurtsmith AFB households. The

2,087 Air Force base dependents account for over a third of total enrollment. Distributions are presented in the table below.

Table I-32. WURTSMITH AFB DEPENDENTS ENROLLED IN
PRIMARY IMPACT AREA SCHOOL DISTRICTS

<u>School District</u>	<u>1975-76 Total Membership</u>	<u>AFB Dependents</u>	<u>Percent of Total Membership</u>
Oscoda Area Schools	3,954	1,995	50.5%
Tawas Area Schools	<u>1,972</u>	<u>92</u>	4.7
Total	5,926	2,087	35.2%

Source: Superintendent, Oscoda Area Schools;
Office of Education, U.S. Department
of Health, Education and Welfare; and
Hammer, Siler, George Associates

In addition to public school enrollment, there are two parochial schools in the area which serve a total of 386 students. Only two Air Force Base dependents attend these schools. Currently, Central Michigan University, Park College and Alpena Community College (ACC) provide higher education through Wurtsmith facilities and maintain an extension office on base. The program employs an average of 40 part-time college instructors each semester and two full-time office staff personnel. Last year ACC had 1,812 registrations in 119 college level classes with 725 people. Of the 725 students, 61 percent were military, 13 percent dependents, and 26 percent civilians.

MEDICAL (AFERN 4.3.4)

Iosco County has one acute care hospital, the 62 bed Tawas-St. Joseph Hospital and one extended care unit, the 64 bed Iosco County Medical Facility, also located in Tawas City. The St. Joseph Hospital has a medical/surgical ward, an obstetrical ward and a coronary care unit.

The Iosco Medical Care Facility provides intensive care and nursing care for the county. For any treatment not offered at these two units, patients may utilize larger more comprehensive medical facilities in Bay City, Saginaw, Flint, or Detroit.

St. Joseph's Hospital is in the planning stage of a \$400,000 expansion program designed for early cancer detection. This facility will house a new nuclear medicine section.

The hospital at Wurtsmith has approximately 20 beds with 15 doctors serving military personnel. Services include internal medicine, general surgery, pediatrics and obstetrics/gynecology. The hospital on Wurtsmith AFB is also planning an expansion. Under the plan, square footage is to be doubled over a three year period to allow the hospital to meet new health planning criteria.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

The Wurtsmith AFB Security Police have no formal agreements with local police authorities. Wurtsmith AFB does, however, have mutual aid agreements with the fire departments of Oscoda and Au Sable townships and Tawas and East Tawas. Several members of the Base Fire Department are also members of the local volunteer fire departments.

The local community provides a broad range of social services ranging from a crisis intervention office to a community mental health service. Many of these services utilize volunteers extensively and some of these volunteers are base personnel. According to Iosco County Social Service representatives, however, base participation in most of the local social service programs is minimal.

Base personnel support many of the local cultural programs by both active participation as performers and by their attendance at local culture events. The list of clubs in the local area is extensive and typical of most communities of its size. All of these organizations have members who are stationed at the base.

There are two major banking institutions in the Wurtsmith Primary Impact Area. Together they have approximately \$52,000,000 in deposits, over \$5,000,000 of which are deposits of base military and civilian employees; this is approximately 10 percent of total deposits.

There are approximately 700 military retirees from all the services residing in Iosco County at the present time. In addition, many other military retirees who live outside of Iosco County also make use of the facilities at Wurtsmith Air Force Base on a regular basis. These retirees and their dependents are authorized to use the commissary, the exchange and the medical facilities at the base and they have access to many of the administrative services and recreational facilities as well.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

The Tri-City Airport, located approximately 90 miles south of Wurtsmith AFB, is the nearest civilian airport which has regularly scheduled commercial flights. Two airlines, United and North Central, serve the area.

A special charter service exists for Wurtsmith AFB personnel on military orders. This service is provided by Seaco Airlines, Alpena, Michigan.

Welch Airlines maintains the planes and provides pilots for Seaco Airlines. Currently there is a temporary 18-month agreement allowing Seaco Airlines to land at the base, and the company operates two flights daily with a morning flight originating at Alpena, stopping at the base, and continuing to Chicago, with a return flight in the evening. This service is used by base personnel primarily as a commuter linkage to O'Hare Airport in Chicago.

Only one railroad, the Detroit and Mackinac Railway Company, passes through Iosco County. Shipments to Wurtsmith AFB consist primarily of bulk petroleum supplies. Over the last 12 months, 2,670 tank cars were received on base. Shipments of other cargo amounted to about 1.7 million pounds.

U.S. Highway 23 is the major highway serving the area around Wurtsmith AFB. Average daily traffic and design hourly volumes projected for the year 1976 are 11,000 and 2,400 vehicles, respectively. Iosco County Highway F-41 is the primary route from U.S. Highway 23 to Wurtsmith AFB. It also serves some of the recreational and rural needs of the area. Highway F-41 is considered to be overloaded with traffic, causing hazards, particularly in the winter months. Load restrictions are imposed for short periods each spring due to frost damage. The County Road Commission has submitted a plan to widen Highway F-41 to four lanes. Plans currently call for \$1.5 million in federal funds to be spent on improvement of this road.

UTILITIES (AFERN 4.2.2)

All water used at Wurtsmith AFB is obtained from on-base wells; the base has its own treatment and distribution system as well as its own wastewater collection and treatment system. In addition to its on-base utility systems, Wurtsmith AFB utilizes several civilian community utilities. Among the services provided locally are electrical

power, natural gas, telephone, solid waste disposal and sewage service.

Electrical power is supplied to the base by the Consumer's Power Company, a privately owned utility serving the lower middle peninsula areas of Michigan. Based on current demands and the substation capacity, the existing base system could be expanded approximately 44 percent. Currently the commercial power company is not operating at full capacity.

Michigan Bell Telephone Company provides both residential and administrative telephone service to Wurtsmith AFB. Fuel oil procurements by Wurtsmith AFB totaled \$1,087,000 in fiscal year 1976; about \$540,000 of this was purchased through the Barbier Oil Company. This procurement represents about 10 percent of the total sales of fuel oil made by this company. Procurements by the base for solid waste disposal services in fiscal year 1977 are with Hager Sanitation Service. This represents an annual procurement of approximately \$430,000.

The Michigan Consolidated Gas Company provides service to a number of off-base residences of civilian and military personnel. The company does not supply gas directly to the base. It is estimated that off-base demand constitutes about 16 percent of the company's total load in Oscoda and Au Sable townships, and contributes about \$190,000 in annual revenues. The public water and sewer services of Oscoda Township and the Cities of Tawas and East Tawas count some off-base personnel among their residential customers.

LAND USE (AFERN 4.4.3)

Forest lands make up over 69 percent of the land area and 67 percent of the total area of Iosco County. Inland water area constitutes 3.4 percent of the county's total area. The county is ideally suited for recreational use as about 35 percent is composed of state and

national forests. The Lake Huron shoreline is also a prime recreational attraction. Agricultural lands are primarily concentrated in the southwestern third of the county. The greatest population concentrations are in the area of Oscoda-Au Sable Townships, Tawas City, East Tawas, Whittemore, and the unincorporated area of Hale. A land use profile of Iosco County is presented in the following table.

Table I-33. LAND USE PROFILE OF IOSCO COUNTY

<u>Use</u>	<u>Acres</u>	<u>Percent</u>
Inland Water	12,416	3.4 %
Land Surface	347,904	96.6
Forest Land	242,200	67.2
Agriculture Land	74,498	20.7
Transportation Use	9,491	2.7
Recreational Use	341	0.1
Developed Land (Urban)	3,911	1.1
Other	<u>17,363</u>	<u>4.8</u>
Total	360,320	100.0%

About 1 percent (3,360 acres) of the total county land area is devoted to seasonal homes. Most of this development is near bodies of water and little or no local control is exercised over how or where this development occurs. However, Iosco County has been developing a model zoning ordinance which could be adopted by all the county's townships and would aid in the consistent administration of zoning.

Land use in Oscoda and Au Sable townships has been largely influenced by the land ownership pattern of Wurtsmith AFB, state and national forests, and lands held in lease by Consumer's Power Company (largely along the Au Sable River). The two townships have a sizeable unincorporated core area of mixed commercial development, some industrial activities and a considerable concentration of residential development in some areas. The commercial use is largely highway and

tourist-oriented, although the Oscoda-Au Sable business district also serves as a commercial and service center for Wurtsmith AFB. The close proximity of Wurtsmith AFB has contributed to much of the area's residential development, particularly around Van Etten Lake (northeast of the base) and in some of the area's newer housing subdivisions.

Between the Oscoda-Au Sable area and the Tawas area, development is primarily year-round homes, cottages, motels, and some scattered commercial businesses along U.S. Highway 23.

HISTORICAL/ARCHEOLOGICAL SITES

Contact with State Historic Preservation officials indicated that there are no sites of historical or archeological significance on Wurtsmith AFB.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Wurtsmith AFB is located off airways in an area of relatively low traffic density. There are no significant hazards to flight in the local area. The nearest significant hazard is a 1,349 foot TV tower located approximately 60 nautical miles to the north-northwest of Wurtsmith. Wurtsmith is not located on any civil flyways and is minimally affected by light aircraft transiting the Lake Huron shoreline during the summer months. Proposed expansion of facilities and an increase in associated flying activity at Iosco County Airport, located approximately 8 nautical miles to the south, could possibly affect future use of the navigable airspace surrounding Wurtsmith AFB.

Wurtsmith AFB generates noise due to aircraft both in the air and on the ground. Noise from engine run ups, required to perform maintenance, is scheduled during the day to minimize the disturbance. Based on existing missions and operations, all flight pattern altitudes and locations have been adjusted in the best interest of safety to reduce the impact of noise on communities in the vicinity of the base.

CHAPTER II. RELATIONSHIP OF THE PROPOSED ACTION TO LAND USE PLANS,
POLICIES, AND CONTROLS

A. KINCHELOE AIR FORCE BASE AREA

The analysis of the proposed action has taken into account all available land use plans and zoning ordinances for Chippewa County. The primary impacts of the proposed action on off-base land use would relate mainly to changes in land ownership and value in area townships surrounding the base and also in the City of Sault Ste. Marie.

The announcement of possible closure of Kincheloe AFB has already significantly altered the land market throughout Chippewa County. If the base were closed, the greatest decline in land values would occur on lands held for potential residential development. While accurate projections on the location and market value change of specific properties cannot be made, the decline in land values at some localities will be significant. Housing vacancies and, to a lesser extent, vacancies in commercial businesses which were forced to liquidate would leave properties vulnerable to reduced investment and maintenance, which may in turn further lower land values.

The majority of the lands surrounding the base are state-owned forests. There are, however, isolated tracts of privately-owned land bordering the base to the west and southwest. Future ownership and value of these lands will be determined by the future use of the base facilities in the event of closure. Ownership of publicly-owned lands is not expected to be affected if Kincheloe AFB is closed.

The relative percentage distribution of forest land, agricultural land, developed land, and land used for transportation and recreation throughout Chippewa County will not change as a result of closing Kincheloe AFB.

Past residential development in the Rudyard-Kinross area has essentially been a direct result of the presence of Kincheloe AFB. New residential development in these areas has essentially ceased as a result of the announcement of possible base closure, and future residential development would be significantly slower if the base were closed. Development of a 32-acre recreational complex in Rudyard Township will be altered in scope, and plans for a housing development in Kinross Township have been cancelled. Maintenance funds for Kinross Township Park, located approximately three-fourths of a mile from the base's west gate, will be severely reduced.

The majority of commercial establishments in Kinross are service-type enterprises and dependent on Kincheloe AFB. Examples of these businesses include trailer parks, rental units, garages, gas stations, grocery and sporting goods stores. Some of these businesses would be forced to liquidate or relocate if the base were closed; the commercial lands would likely be idle or underutilized for a significant transition period. Future use would depend on the economic recovery strategies adopted by the area.

Residential development in a number of areas of Sault Ste. Marie has halted with the announcement of possible base closure. If the base were closed, new residential development would be greatly reduced during an undetermined transition period.

Closure of the base would be expected to alter development trends in Chippewa County to such an extent that past township and regional land use plans would no longer be valid. Development of seasonal homes and recreational facilities would continue in the primary recreation areas, but since base personnel make extensive use of commercial recreation facilities the loss of the base could also alter the recreational use trends for the area. Commercial developments along I-75 which are marginal operations may liquidate or relocate out of the area. In general, however, the central corridor's

commercial enterprises cater to a broader recreation-tourism market and these land uses would not be expected to change significantly with closure of Kincheloe AFB.

B. BLYTHEVILLE AIR FORCE BASE AREA

The relative percentage distribution of acreage utilized as cropland, forest land, range land, pasture land, and developed land in Mississippi County will not change as a result of closure of Blytheville AFB. The primary impacts on land use will be related to changes in land values, ownership patterns, and land use trends in developing areas in the Blytheville-Gosnell urban area.

The announcement of possible closure of Blytheville AFB has already significantly altered the land market in the Blytheville-Gosnell urban area. If the base is closed, the greatest decline in land values would occur on parcels held for potential commercial or residential uses, particularly in developing fringe areas of the City of Blytheville. While accurate projections on the location and market value change of specific properties cannot be made, the decline in the land value at some localities will be significant. Housing vacancies, and to a lesser extent, vacancies in commercial businesses, will also leave properties vulnerable to reduced investment, which may further lower land values.

Housing and commercial developments in Blytheville and Gosnell have been greatly influenced by base-generated demand. Examples of rapidly growing residential areas include developments on the northern perimeter of Blytheville (south and east of the golf course and also east of U.S. Highway 61) and in the northeastern area of the city. A significant decline in the rate of development of these areas has already occurred as a result of the announcement of the potential base closure. Similarly, development of commercial areas (for example, the I-55 interchange area east of Blytheville) has slowed. If the base were closed, the

rate of development of many areas previously in transition to residential and commercial use in Blytheville and Gosnell would be significantly reduced. The Mississippi County Community College has recently purchased an 80-acre plot of land about 4 miles from the base. The rate of development near this area would also be slowed if Blytheville AFB were closed.

No determination has been made of the future use of base facilities if the base were to be closed. Future land use trends in Blytheville and Gosnell, particularly in the area immediately surrounding the base, would be largely determined by the economic recovery measures or mitigative actions undertaken by the local community. Similarly, development potential of land near the base will depend on future use of the facilities.

C. WURTSMITH AIR FORCE BASE AREA

The relative percentage distribution of acreage for forest, agricultural, transportation, recreation, and developed uses in Iosco County will not change as a result of the closure of Wurtsmith AFB. The primary impacts on land use will be related to changes in land value, ownership patterns, and land use trends in developing areas in the Oscoda/Au Sable area.

The announcement of possible closure of Wurtsmith AFB has already significantly altered the land market in the Oscoda/Au Sable area. If the base is closed, the primary impact on land values and ownership patterns will occur in this area, particularly on lands developed for residential use by base personnel. While accurate projections on the location and market value change of specific properties cannot be made, the decline in land values at some localities will be significant. There would be essentially no new residential construction for an indefinite transition period; similarly, there would be little new demand for commercial developments. Trailer park areas which are

currently dependent on base personnel will be vulnerable to reduced investment, which may further reduce land values in these areas.

Since 1970, real market values of residential as well as agricultural use lands in Iosco County have approximately doubled in value. A significant decline in the rate of development of subdivision areas north of Oscoda and also near Lake Huron has already occurred with the announcement of possible closure of the base. If the base were closed, the rate of development of these and other residential and commercial use areas in Oscoda and Au Sable townships would be significantly reduced.

No determination has been made of possible future uses of the base and its facilities if Wurtsmith were to close. Future land use trends in Oscoda and Au Sable townships and particularly in the area surrounding the base would be largely determined by the economic recovery measures or mitigative actions associated with the base closure. The unincorporated area of Oscoda/Au Sable has been attempting to develop a more diversified economic base with an industrial park but this development has been slow, partially because of the difficulty in acquiring a large enough tract of land to qualify for the highest industrial park classification assigned by the state. The future use of this 37-acre industrial park in Au Sable Township, which is in the earliest stages of development, would also depend largely on the future use of the base, as the park is only about three miles from the base.

CHAPTER III. PROBABLE IMPACT OF THE PROPOSED ACTION ON THE ENVIRONMENT

INTRODUCTION

In this chapter of the Environmental Impact Statement, the range of environmental impacts on the areas surrounding the three Strategic Air Command bases identified during the analysis of the proposed action is discussed. The two major categories of impacts discussed are the natural and human environmental impacts.

A. Kincheloe Air Force Base Area

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

The candidate action should not generate significant adverse effects, nor alter the fundamental physiographic, geological, and soil characteristics and properties of the area. While the soil consists primarily of poorly graded sand, subject to erosion when disturbed, it is sufficiently fertile to support adequate vegetal cover, and has been managed to maintain such cover. Allowing it to revert to a natural state may actually enhance erosion protection. Surface and sub-surface conditions should remain unchanged since construction projects are not involved. Solid waste and refuse generation should decrease. The overall effect should be minimal, and the useful life of sanitary landfills in the area should be extended.

The Department of the Air Force acquired all of the mineral estate on the 888 acres that are government-owned. Any transfer of government land to other than the United States shall be subject to reservation by the United States of oil, gas and mineral rights.

The Environmental Protection Agency expects the impacts on the natural environment to be minor.

WATER (AFERN 3.2)

A decrease in demand on water and sewage facilities on base and in the civilian community would occur. On-base waste water discharges (currently 0.65 million gpd) would be eliminated. While the effect on effluent receiving waters should be favorable, there are no existing discharge problems.

AIR (AFERN 3.3)

Air quality in the environs of Kincheloe AFB probably will be improved as a result of the proposed action. A decrease in air pollutant emissions on base and in the civilian community would be anticipated. The decrease on base would result directly from the elimination of aircraft operational activity and stationary emissions.

BIOTIC ENVIRONMENT (AFERN 3.4)

The proposed action may have an initial slight negative impact on the biota but recovery should occur within a few months. A long-term beneficial impact on the biotic environment should result. Presently there are no major game or wildlife programs in being at Kincheloe. There are no records of occurrence for any rare, threatened or endangered species of plants or animals on base property.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1.1)

Under the proposed action, the 449th Bombardment Wing and its supporting organizations would be inactivated and Kincheloe Air Force Base

would be closed. This would result in the direct loss of 3,074 military and 737 civilian personnel (FTE). A summary of the proposed personnel reductions at Kincheloe AFB is presented in the following table.

Table III-1. SUMMARY OF PROPOSED PERSONNEL
REDUCTIONS AT KINCHELOE AFB

	<u>Military</u>		<u>Total</u>	<u>Civilian</u>			<u>Total Personnel</u>
	<u>Officers</u>	<u>Airmen</u>		<u>DAF</u>	<u>NAF</u>	<u>Total</u>	
Assigned as of 3-31-76	460	2,614	3,074	543	194	737	3,811
Number To Be Reduced	<u>460</u>	<u>2,614</u>	<u>3,074</u>	<u>543</u>	<u>194</u>	<u>737</u>	<u>3,811</u>
Residual After Action	0	0	0	0	0	0	0

Source: Description of Proposed Action and Alternatives,
Headquarters, Strategic Air Command, Directorate
of Plans, Policy and Programs

If the proposed action to close Kincheloe is implemented, population losses throughout the Primary Impact Area can be anticipated. As a direct result of base closure, somewhat over 3,000 military personnel would be transferred to other installations and depart from Chippewa County. It is more difficult to predict the behavior of base civilian employees terminated by the closure action.

Some Civil Service employees nearing retirement may take early retirement and remain in the area. Other employees may be secondary wage earners whose spouses retain their jobs in the civilian sector; some such households may remain in the area. Some civilian employees with strong roots and family ties in the area may remain when their jobs are terminated and collect unemployment compensation until new employment opportunities are found or unemployment benefits run out. Still others may decide to move and seek employment in other Michigan

counties or be placed by the Civil Service in position elsewhere in the country.

As the economic impact of base closure reverberates throughout the local economy, other indirect population losses will undoubtedly occur. As noted in the following section on employment, approximately 1,000 jobs in the civilian sector of the economy will be lost as an indirect result of base closure. The holders of these jobs will likewise face the decision whether to remain in the community collecting unemployment benefits while seeking alternative employment opportunities or move with their families to seek jobs elsewhere. With no previously documented experience upon which to base estimates, indirect population losses can certainly be anticipated but the quantitative magnitudes cannot be predicted with any reasonable degree of certainty. Therefore, for purposes of this analysis, only direct population losses have been computed.

Based on previous experience at other Air Force Base installations, the following assumptions have been made regarding direct population losses:

- o All military personnel and their dependents would leave the Primary Impact Area;
- o Sixty-two percent of the Appropriated Fund personnel and their dependents would leave the area and relocate in other jurisdictions outside the Primary Impact Area;
- o The residual 38 percent of the Appropriated Fund personnel and all the Non-Appropriated Fund employees would remain in the community along with their dependents.

In applying these assumptions, Chippewa County would lose nearly 25 percent of its 1976 baseline population as a direct result of Air Force Base closure. Estimated direct population losses for all the impact areas are presented in the table following.

Table III-2. ESTIMATED DIRECT POPULATION LOSS,
KINCHELOE AIR FORCE BASE IMPACT AREAS

	1976 Baseline <u>Population</u>	<u>Estimated Direct Population Loss</u>	
		<u>Number</u>	<u>Percent</u>
<u>Primary Impact Area:</u>			
<u>Chippewa County</u>			
Kinross Twp.	8,320	6,230	74.9%
Kincheloe AFB :	(5,900)	(5,900)	(100.0)
Balance of Twp.	(2,420)	(330)	(13.6)
Sault Ste. Marie	16,400	1,240	7.6
Dafter Twp.	1,030	170	16.5
Pickford Twp.	1,330	330	24.8
Rudyard Twp.	1,470	280	19.1
Superior Twp.	780	90	11.5
Trout Lake Twp.	<u>330</u>	<u>20</u>	6.1
Subtotal	29,660	8,360	28.2
Balance of Chippewa County	6,690	310	4.6
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>36,350</u>	<u>8,670</u>	<u>23.9%</u>
<u>Other Impact Areas:</u>			
<u>Mackinac County</u>			
Clark Twp.	2,060	100	4.9%
Balance of Mackinac County	8,630	40	0.5
TOTAL OTHER IMPACT AREAS	10,690	140	1.3%

Source: Hammer, Siler, George Associates

The population loss would be most severe in Kinross Township. The departure of nearly 2,500 base personnel and their dependents would result in a total population loss of approximately 75 percent. The vast majority of these, however, represent persons currently living on the Air Force Base itself and the off-base population loss within Kinross Township would amount to roughly 14 percent of the township's non-base population.

Other jurisdictions within the Primary Impact Area would suffer population losses ranging from six percent to 25 percent. Reflecting the numerical concentration of base personnel within Sault Ste. Marie, the estimated population loss would amount to 7.6 percent of the city's total. Though the anticipated losses are not nearly so high in numerical terms, population losses for Dafter, Pickford, Rudyard and Superior townships would reduce their 1976 baseline populations 12 to 25 percent.

Within Mackinac County, only Clark Township would be significantly affected. The 100 persons estimated to leave as a direct result of base closure account for five percent of the township's baseline population. Throughout Mackinac County as a whole, the estimated direct population loss is on the order of one percent.

Even in measuring only the direct population loss associated with closure of Kincheloe AFB, the action would severely impact Chippewa County; almost one-fourth of its baseline population would be lost. The impact on population would be compounded significantly by indirect population losses but these cannot be reliably estimated or quantified.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

EMPLOYMENT (AFERN 4.2.2)

The proposed action at Kincheloe Air Force Base would result in both direct and indirect employment losses. Transferred or terminated military and civilian personnel represent the direct employment losses. The elimination of these jobs and the termination of other base influences such as procurements and other purchases in the local economy would reverberate and have secondary job loss effects. These indirect job losses would occur in several ways.

Both civilian and military personnel at the base eat in local restaurants, buy clothing and other goods from local retail establishments and purchase at least some grocery items from local supermarkets. With the departure of base personnel and their dependents, retail sales will diminish and local retailers may be forced to reduce employment levels.

Similarly, the termination of base procurement and construction awards to local firms may also affect employment levels at these establishments. Utility companies, public school systems, local governments and other employers in the area may likewise be forced to lay off employees because of diminished activity resulting from base closure. Some small businesses and others now only marginally profitable may be forced to liquidate and go out of business entirely. These impacts will continue to ripple throughout the local economy in a variety of subtle ways and have a cumulative impact on total employment in the civilian sector.

In order to measure the magnitude of these indirect losses, employment multipliers were developed for the Kincheloe AFB Primary Impact Area. Two separate multipliers were derived: a civilian multiplier and a military multiplier. The civilian multiplier represents the mathematical relationship between civilian personnel working on the base and total employment in the civilian sector of the local economy as a whole. Reflecting their incomes and expenditure patterns within the local civilian sector, the multiplier derived for the Kincheloe Primary Impact Area indicates that for every one civilian employee at the base another .77 jobs in the civilian sector are attributable to civilian employment on the base.

Because of on-base housing, exchange and commissary privileges, the average military man spends less in the civilian sector of the economy. The military multiplier developed for the Kincheloe Primary Impact Area indicates that for every uniformed military person assigned to the base, .14 jobs in the civilian sector are attributable to military personnel levels at Kincheloe.

Applying these multipliers to the direct reduction in Kincheloe's civilian and military personnel levels expresses the indirect job loss in the civilian sector of the economy that can be expected following base closure. As an indirect result of the 3,811 civilian and military personnel transferred or terminated, then, the Chippewa County economy will lose an additional 997 jobs. A summary of these direct and indirect employment losses is presented in the table below.

Table III-3. SUMMARY OF DIRECT AND INDIRECT EMPLOYMENT LOSSES IN THE KINCHELOE AFB PRIMARY IMPACT AREA

<u>Direct Employment Loss</u>	<u>Number of Jobs</u>
Military	3,074
Civilian	<u>737</u>
Subtotal	(3,811)
<u>Indirect Employment Loss</u>	
Military (Net Multiplier of .14)	430
Civilian (Net Multiplier of .77)	<u>567</u>
Subtotal	(997)
<u>Total Employment Loss</u>	4,808
Percent of Total Baseline Employment ^{1/}	43.4%

^{1/} Includes both civilian and military employment.

Source: Description of Proposed Action and Alternatives, Headquarters, Strategic Air Command, Directorate of Plans, Policy and Programs; and Hammer, Siler, George Associates.

The direct loss of 3,074 military personnel will result in a net loss of 430 additional jobs in the civilian sector while the termination of 737 civilian employees at the base will result in a net loss of 567 additional jobs in the civilian sector. When both direct and indirect employment losses are taken into account, the 4,808 jobs lost as a result of the base closure action represent 43.4 percent of all jobs in Chippewa County as of March 31, 1976. In losing nearly half of its baseline

military and civilian employment, the Chippewa County Primary Impact Area would suffer a severe employment loss.

In using a somewhat different methodology, the Kincheloe Air Force Base Impact Special Study -- prepared by local area residents -- predicted a total civilian job loss of about 2,417. While the numerical values differ, the magnitude of both indicate significant adverse impacts.

Unemployment

The resident civilian labor force in the Primary Impact Area would be reduced from 11,225 to 10,908 persons. This is based on the assumption that 62 percent of the Appropriated Fund civilian workers would relocate. Since the worst possible case has been assumed, those persons who may choose to retire or the dependents of base personnel who held jobs in the local economy have not been eliminated from the labor force. Therefore, the 1,374 civilians unemployed as a result of the proposed action in addition to the 2,100 persons unemployed before the action would result in a severe unemployment rate of 31.9 percent. Labor force and unemployment data are presented in the table below.

Table III-4. CIVILIAN LABOR FORCE AND UNEMPLOYMENT
IN THE KINCHELOE AFB PRIMARY IMPACT AREA

March 31, 1976 Baseline

Civilian Labor Force	11,225
Total Unemployed	2,100
Unemployment Rate (1975 Annual Average)	18.7%

Post-Action

Civilian Labor Force	10,908
Total Unemployed	3,474
Unemployment Rate	31.9%

Source: Michigan Employment Security Commission;
and Hammer, Siler, George Associates

Already beset by severe and persistent unemployment, the Primary Impact Area would suffer a severe blow following Kincheloe closure; nearly one-third of its labor force would be unemployed. With a depressed economy to begin with, Chippewa County has few resources for recovery.

The Kincheloe AFB Impact Special Study differed somewhat in its estimation of post-action unemployment rates: nearly 40 percent in Chippewa County and as much as 25 to 29 percent in the three-county region. These differences are attributable to varying methodologies and assumptions (refer to Comparison of Major Study Submittal on page 110).

Total Personal Income

Total personal income in the Chippewa County Primary Impact Area totalled approximately \$161.1 million during calendar year 1975. As illustrated in the table below, base payrolls represented 22.5 percent of total personal income in the county, a sizeable proportion of the total.

Table III-5. BASE PAYROLL CONTRIBUTION TO TOTAL PERSONAL INCOME IN THE KINCHELOE AFB PRIMARY IMPACT AREA

1975 Total Personal Income	\$161,100,000
Annual Base Payrolls	36,310,000
Percent of TPI	22.5%

Note: Values expressed in 1975 constant dollars.

Source: November 30, 1976, Leave and Earning Statement File, U.S. Air Force Accounting and Finance Center; Non-appropriated Fund Financial Management Office, Kincheloe Air Force Base; and Hammer, Siler, George Associates

If closure of Kincheloe AFB were implemented and its payroll contribution to the community terminated, the economy of Chippewa County would experience not only a direct loss of 22.5 percent of its total personal income but an additional decline in income due to indirect job losses.

If the proposed closure of Kincheloe AFB is implemented, the Primary Impact Area economy will experience a loss of \$7.5 million in personnel income as a result of indirect job losses. This was estimated by applying a median earnings per worker figure of \$7,541 for the impact area to the 997 indirect job losses.

Retail Sales

To determine current spending by base personnel in civilian sector retail establishments and to estimate the direct impacts of base closure on total retail sales, the total annual retail expenditure of base personnel was derived by applying a retail sales expenditure factor to total base payroll. Actual sales at the Kincheloe AFB commissary, exchange and clubs were subtracted from the total expenditure potential to indicate the amount spent in civilian sector establishments. This methodology overstates the contribution of base personnel to civilian retail sales in the area somewhat since some purchases were undoubtedly made in other areas. As a "worst case" methodology, however, it expresses the maximum possible direct impact of base personnel on local retail sales and the loss that would accompany base closure.

Table III-6. ESTIMATED DIRECT IMPACT OF KINCHELOE AFB PERSONNEL ON RETAIL SALES IN THE PRIMARY IMPACT AREA

Total 1975 Primary Impact Area	
Retail Sales	\$79,656,000
Maximum Attributable to	
Base Personnel	\$10,785,650
Percent of Total	13.5%

Source: Bureau of Labor Statistics, U.S. Department of Labor; Survey of Buying Power, 1976; Tab A-1 (revised) KAFB; and Hammer, Siler, George Associates

Base personnel accounted for a maximum of \$10.8 million in retail sales at Primary Impact Area establishments, 13.5 percent of total reported sales. If retail sales were to decline 13.5 percent following base

closure, it is anticipated that a number of employees would lose their jobs and that some small businesses, especially those catering to base personnel, would go out of business. The loss of these jobs is accounted for in the multiplier used to express total indirect job losses.

PUBLIC FINANCE (AFERN 4.2.3)

If Kincheloe AFB were closed, a variety of realignments in public revenues and expenditures would ensue. These impacts would be evident at both the state and local levels. Because of the formulas often used in the apportionment of federal and state funds among constituent jurisdictions, few of the revenue and expenditure impacts can be evaluated in detail. Only one of them can be quantified with any degree of confidence: as reported under AFERN 4.3.3, public school revenue losses from federal and state sources have been estimated.

Apart from these fiscal impacts on local school system revenues, other major sources of state and local revenues will be affected even if the dollar values cannot be quantified with certainty: income and sales taxes, federal revenue sharing and local ad valorem real property taxes. At the state level, the two major sources of revenue that would be affected are the personal income tax and the sales tax.

Income and Sales Taxes

Since many military personnel assume one permanent place of residence for tax purposes throughout their careers, transfers from Kincheloe AFB to other bases in the country will not have a major impact on state income tax revenues. The income tax loss from terminated civilian employees and indirect job losses may be more severe even if their numbers are smaller. These impacts cannot, however, be quantified.

No local income taxes are collected by Michigan counties. A portion of state income tax collections are returned to counties, but these are based on the county's share of the state's 1970 population. No impact on income tax distributions by the State of Michigan to the Chippewa County Primary Impact Area would be perceived until 1980, the year a new population base would be established.

State sales tax losses attributable to direct impacts of base closure can at least be approximated. Based on the estimated \$10.8 million spent by base personnel at retail establishments in the civilian sector, the state derives approximately \$430,000 annually in sales tax revenues from base personnel at its four percent taxing rate. Even as a "worst case" example, this loss in sales tax revenues represents less than one-tenth of one percent of total state sales tax collections of \$1.1 billion in 1975. No local sales taxes are collected by Chippewa County. Therefore, no impact on county tax revenues is expected due to reductions in retail purchases by Kincheloe personnel.

Unemployment Compensation

Base closure would create both direct and indirect job losses. In most cases, unemployed personnel would be eligible for unemployment compensation benefits. An unemployment compensation benefit program is actually an insurance program which by design is intended to be wholly supported by the mandated contributions of the private and public sector employers who participate in the state-administered program. Although unemployment benefits are paid through a state program, the funds utilized originated with the employers whose contributions are "banked" until needed. Any overdraw against contributions banked must be repaid to the state in the future.

At this point in time the number of people finding new jobs in the area, increasing their average daily commuting distances to take jobs outside the area or relocating to other areas cannot be accurately projected.

In this analysis, then, the total unemployment benefit program impact -- or cost -- was not developed. The maximum cost for unemployment benefits to federal civilian employees whose job losses would be a direct result of a base closure would be: (65 weeks) x (\$136/week) x (737 civilian jobs), or \$6.5 million.

Local Revenues Sources

At the local level, the closure action would have a more pronounced impact on fiscal affairs. Federal revenue sharing and ad valorem taxes are among the revenue sources most difficult to evaluate.

Title I of the State and Local Fiscal Assistance Act of 1972 (Revenue Sharing) provides for the distribution of Federal funds to units of local government. The amounts to be distributed to each unit of government are determined by applying a set of formulas to descriptive data pertaining to each unit. These formulas utilize population, per capita income, adjusted taxes and inter-governmental transfers as their basic data elements to determine each government's share of the total amount. The resulting computations distribute available funds among all eligible units of local government on a national basis. While the closure action will undoubtedly alter many of the measures utilized in the allocation formula, the Office of Federal Revenue Sharing in the U.S. Treasury Department has stated that no reliable estimates of the impacts on a local government can be made. In part, this is due to the nature of the allocation process: the effect of changes in one local area is dependent upon comparisons with all other eligible units of local government in the U.S. Even estimated direct changes in population are not a reliable indicator since this factor in the formula is important only within certain minimum and maximum per capita income thresholds.

In sum, estimated changes in revenue sharing based on per capita amounts do not reflect the characteristics of the distribution formula and no

other reliable method of gauging the impacts is available. While federal revenue sharing funds may diminish, it is impossible in this analysis to predict the amounts or order of magnitude.

Real estate property taxes are the single largest source of revenue for most units of local government. While real estate values in the marketplace will undoubtedly diminish, it is not certain that property tax revenues will necessarily decrease. This depends upon local government operating costs and budget requirements, changes in assessed values or the effective tax mill rate.

To some extent, the departure of base personnel and their dependents as well as other indirect population losses may diminish the demand for certain types of public services. However, many operating costs in local government are "fixed" and cannot be readily adjusted to reflect changes in the population level. In continuing to meet operating costs, the same or only slightly diminished amounts of property tax revenues may be required by the local governments most severely impacted by base closure.

In the face of a depressed real estate market and diminished values, local governments have several options in closing the gap between revenue requirements and the value of their real estate tax bases: institute new types of taxes, alter the assessment/market value ratio used in levying real estate taxes or raise the real estate tax rate itself. Whatever options they pursue, local government decisions will undoubtedly increase the tax burden on remaining households in one way or another.

Capital Improvements Programming

The proposed closing of Kincheloe AFB could affect the status of planned capital improvements projects in several ways. It could be determined

that some projects are no longer necessary if the population they were to serve is substantially reduced. The cost of others may not be supportable as the county's tax base and consequent bonding capacities are reduced over the next few years. Commitments which have already been made to projects which are no longer financially feasible or politically desirable may cause problems in local government financing and channel available resources away from basic service provision to debt service. Some projects which may be necessary to the area will no longer be financially feasible and will have to be postponed.

BASE PROCUREMENT (AFERN 4.2.4)

Were the base to close, the Chippewa County Primary Impact Area would lose approximately \$5.5 million annually in non-construction procurements and its contract construction firms would lose several hundred thousand dollars on an average annual basis. In combining both non-construction procurements and average annual construction awards, the Chippewa County Primary Impact Area would lose approximately \$5.9 million annually. These are summarized in the table below.

Table III-7. ESTIMATED ANNUAL LOSS IN CONSTRUCTION AND PROCUREMENT AWARDS, KINCHELOE AFB PRIMARY IMPACT AREA

<u>Procurement Type</u>	<u>Amount (000)</u>
Non-construction Procurements	\$5,536.5
Average Annual Construction Awards	<u>326.5</u>
Total	\$5,863.0

Source: Hammer, Siler, George Associates

HOUSING (AFERN 4,2,5)

Closure of Kincheloe Air Force Base would have both short-term and long-term effects on the previously healthy housing market in the Primary Impact Area. Even the announcement that Kincheloe may be closed has had an adverse impact. In the atmosphere of uncertainty, developers have cancelled planned projects, financial institutions are reluctant to initiate new mortgage commitments and construction loans while consumers themselves are hesitant to make the commitments involved in purchasing a new home. In this current state of uncertainty, the housing market has come to a virtual standstill and the inventory of unsold units on the market continues to increase.

If the Air Force Base is closed, the impact on the community housing market would be severe. Departing military and civilian personnel currently living in off-base housing would place their vacated units on the market and increase the vacancy rates substantially. Those losing their jobs as an indirect result of base closure may be confronted with several problems. Homeowners may wish to relocate to other areas but have difficulty selling their homes. If they remain in the area and collect unemployment benefits, terminated employees may have difficulty meeting rent and mortgage payments. As a consequence, mortgage delinquency rates may increase and unless the homeowner has substantial equity in the unit, mortgage default rates may likewise increase somewhat.

As a consequence of both direct and indirect impacts, the housing market in the Primary Impact Area will be depressed. Even those who retain their jobs and could afford to buy new housing may be discouraged from doing so by the uncertainty concerning the future of the area and the general "depression" mentality. If homes are sold at all, prices will undoubtedly be depressed but it is impossible to predict the relative decline in values with any degree of certainty. In the short run,

certainly, supply would far exceed the demand. To some extent, continued growth in Lake Superior State College enrollments and the demand for off-campus student housing may absorb some of the vacated rental units but will have little impact on the owner-occupied stock.

With no other strong sources of economic growth or expansion, the housing market will be depressed for some time to come unless concentrated recovery efforts stimulate sufficient growth in the local economy to absorb excess units. In measuring the quantifiable effects of base closure on the housing market, only the increase in vacancies attributable to direct civilian and military household losses can be computed. These are presented in the table below.

Table III-8. ESTIMATED DIRECT IMPACT OF KINCHELOE
AFB CLOSURE ON HOUSING MARKET
VACANCIES IN THE PRIMARY IMPACT AREA

	<u>Sault Ste. Marie</u>	<u>Balance of Chippewa County</u>	<u>Total Primary Impact Area</u>
1976 Baseline Vacant Units For Sale or Rent	224	245	469
Units Vacated by Departing Personnel	<u>444</u>	<u>546</u>	<u>990</u>
Total Post-Action Vacant Units for Sale or Rent	668	791	1,459
Post-Action Market Vacancy Rate	13.1%	14.9%	14.0%

Source: Hammer, Siler, George Associates

As a direct result of military and civilian base personnel leaving the Primary Impact Area, it is estimated that nearly 1,000 owner-occupied and rental units will be placed on the market. This will more than triple the number of vacant units for sale or rent and increase the

market vacancy rate substantially. While the absolute values are somewhat different, resulting market vacancy rates within the City of Sault Ste. Marie and the balance of Chippewa County are a roughly comparable 13 to 15 percent.

While these increases in the market vacancy rate are significant, they only represent those attributable to direct household losses and do not begin to account for other indirect job losses and departures from the region. Such secondary impacts will certainly compound the market vacancy rates and add to the severity of depressed housing market conditions.

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

Present forms of government and jurisdictional boundaries are not likely to be altered as a result of Kincheloe AFB closure. However, impacts on public finance, community and municipal services, and public schools will be significant. The economic, cultural, and social losses that the City of Sault Ste. Marie and small area communities sustain will necessitate substantial united community effort to overcome them; new public or quasi-public institutions may emerge to pursue economic recovery strategies and increased commercial and industrial development in the impact area.

It is anticipated that the Eastern Upper Peninsula Regional Planning and Development Commission would emerge as a key agency in efforts to unite the area in economic recovery strategies if the base were closed. Future planning programs of this agency will be significantly affected by changes in area population and the socioeconomic stresses accompanying base closure, as planning has been largely influenced in the past by the presence of Kincheloe AFB and the needs of its personnel and their dependents.

The planning agencies in the City of Sault Ste. Marie will be affected to some degree by the loss of population in the area. Since revenues will be lowered, plans for updating street and utility services will be affected. Numerous base employees are either employed by or work with government agencies. With the closure of the base, reorganization may be required within these bodies.

Additional government services will be needed to help civilian personnel currently employed at the base who will be unemployed if the base is closed. At the same time, financial resources for government operations will be severely strained. Fewer people will have to bear the burden of maintaining services which were planned for use by greater numbers of people. Some skilled labor previously involved in governmental operations will leave the area. A complete summary of the second jobs held by base employees and their dependents is not available but it is estimated that these jobs contribute substantially to the number of trained employees for governmental operations and community services.

EDUCATION (AFERN 4.3.3)

Three public school districts with a total enrollment of 7,822 students serve the students from 98 percent of Kincheloe AFB-related households. Base closure would result in enrollment losses, funding losses, employment losses, and underutilization of existing school district physical facilities.

Rudyard schools, which serve almost 80 percent of base-related students, would be significantly impacted. As shown in the table on the following page, it is estimated that Rudyard would lose all of its 1,362 Type A students and 75 Type B students whose parents are Department of the Air Force Appropriated Fund employees expected to transfer to federal employment positions outside of the area. It is assumed for the purpose

of this analysis that the remaining Type B students would not leave the area.

Table III-9. IMPACT ON PUBLIC SCHOOL ENROLLMENT, KINCHELOE AFB

	<u>1975-76</u> <u>Total Membership</u>	<u>Estimated Loss</u>			<u>Percent</u>
		<u>Type A</u>	<u>Type B</u>	<u>Total</u>	
Rudyard	2,167	1,362	75	1,437	66.3%
Sault Ste. Marie	5,134	0	155	155	3.0
Pickford	<u>521</u>	<u>35</u>	<u>0</u>	<u>35</u>	<u>6.7</u>
Total	7,822	1,397	230	1,627	20.8%

Source: Superintendent of Rudyard Area Schools; Office of Education, U.S. Department of Health, Education and Welfare; Tab A-1 (revised) Kincheloe AFB; and Hammer, Siler, George Associates

The Rudyard School District would lose 1,437 students, or 66.3 percent of its enrollment. In the Sault Ste. Marie schools, the enrollment losses are estimated to be 155 students, or 3.0 percent of total enrollment. It should be noted that only Kincheloe AFB dependents have been considered in this analysis. Neither the U.S. Coast Guard nor Army Corps of Engineers dependents have been considered since they would not be affected by the closure action.

Two funding sources for local public schools would be directly affected by base closure: Public Law (PL) 81-874 funds to areas impacted by federal facilities and state supplementary aid.

PL 81-874 funds from the federal government are based on the Average Daily Attendance (ADA) of dependents. The three school districts which would be impacted received more than \$930,000 in PL 81-874 funds attributable to Air Force Base dependents. Section 3(e) of the law provides for continued but reduced funding to school districts in which

total ADA falls below 90 percent of the previous year's level and in which the ADA of federal dependents equalled at least 10 children and 10 percent of the total enrollment. Under these criteria, only the Rudyard School District would be eligible for continued federal aid at a reduced rate. PL 81-874 impact aid funds would continue at 90 percent of each previous fiscal year until 1978 when the current law expires. If the law is extended, aid to Rudyard schools would continue for the three years following implementation of the proposed action. When federal impact aid funds to the Rudyard Schools District are discontinued, a revenue loss of \$834,150 per year is estimated to occur.

The PL 81-874 payments for the base-related students at the Pickford and Sault Ste. Marie schools would be discontinued in the year immediately following base closure since these districts do not meet the criteria for continued payments. Base closure, then, would result in estimated revenue losses of \$19,010 and \$80,445, respectively.

Additional revenue losses would occur as state aid would likewise be reduced. It is estimated that Rudyard schools would lose \$1,241,300 in state aid while Sault Ste. Marie would lose \$343,150 and Pickford would lose \$36,750. Losses from both federal and state sources would total \$2,075,450 in Rudyard, \$423,595 in Sault Ste. Marie, and \$55,760 in Pickford. These are summarized in the table on the following page.

Table III-10. ESTIMATED FUNDING AND EMPLOYMENT LOSSES TO
PUBLIC SCHOOLS, KINCHELOE AFB PRIMARY IMPACT AREA

<u>School District</u>	<u>Estimated PL 81-874 Funds Loss</u>	<u>Estimated State Aid Loss</u>	<u>Total Estimated Fund Loss</u>	<u>Estimated Teaching/Support Employee Loss</u>
Rudyard	\$834,150	\$1,241,300	\$2,075,450	84/69
Sault Ste. Marie	80,445	343,150	423,595	9/8
Pickford	19,010	36,750	55,760	2/2
Total	\$933,605	\$1,621,200	\$2,554,805	95/79

Source: Office of Education, U.S. Department of Health, Education and Welfare; Superintendents of Rudyard and Sault Ste. Marie School Districts; Kincheloe AFB Special Impact Study; and Hammer, Siler, George Associates.

Insofar as a school district's operating expenses are unlikely to be reduced proportionately to enrollment losses, it is likely that the school districts impacted may find that they require increased tax mill rates in order to compensate for the revenue losses discussed above. As a result of projected enrollment declines, the teaching and support staff at each of the school districts would probably be reduced. Based on the enrollment losses, it is estimated that 84 teaching positions and 69 support staff positions would no longer be required in the Rudyard School District. As 21 of the current teaching positions are filled by spouses of military personnel who would leave the area, a net maximum of 132 people could become unemployed. A total of 17 positions in Sault Ste. Marie schools and four positions in Pickford schools would no longer be required.

According to Michigan statute, each of the school districts would be responsible for all of the unemployment insurance costs for any of the unemployed personnel who could not find new jobs. It is estimated that these costs could amount to a maximum of \$1,082,000 in Rudyard, \$120,225 in Sault Ste. Marie, and \$28,300 in Pickford.

The superintendent of the Rudyard School District estimates that three to four elementary schools, two of which are on Kincheloe AFB, would be vacated as a result of the enrollment decline.

The Soo Area Skills Center -- a joint facility providing supplementary skills training to high school students in a three-county area -- would also be affected in several ways following base closure. Since approximately 12 percent of its current enrollees are Kincheloe dependents, the resulting decline in enrollments may force a reduction in course offerings or result in higher per capita operating costs if the curriculum remains the same. State "added cost" revenues would also decrease as a result of diminished enrollment. Both direct and indirect job losses in the local economy will affect the ability of the skill center to attract students and place them in jobs upon completion of their training.

During 1975, over 2000 military personnel and dependents were enrolled in on-base courses offered by Lake Superior State College. Since on-base courses are financed by tuition paid on base, it is likely that there would be an impact on the college's finances from closure of the base.

MEDICAL (AFERN 4.3.4)

If Kincheloe AFB were closed, a major impact would be the termination of the informal agreement between the base and the residents of Rudyard, Pickford and Kinross which permits civilian emergency patients to be treated at the base hospital if it is closer than the civilian hospitals at Sault Ste. Marie or St. Ignace. This benefit to the community would be terminated upon base closure. In addition, nursing students at Lake Superior State College participate in training opportunities at the

Kincheloe hospital facility. This benefit would also be lost with base closure.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

The benefits of mutual aid agreements between the base and local police and fire departments would be lost to the local community if the proposed action were implemented. In addition to the loss in mutual aid agreements, air traffic control for the Sault Ste. Marie, Michigan County Airport and the Sault Ste. Marie, Ontario Federal Airport which is currently provided by Kincheloe would have to be taken over by another entity if the closure action were implemented.

The proposed closure of Kincheloe AFB would also have an adverse impact on religious, civic and charitable organizations which now depend on Air Force personnel and their dependents for support in varying degrees. Among these organizations are the numerous churches, civic organizations and charities which now operate in Chippewa County.

As a direct result of base closure, local financial institutions would lose the demand accounts and savings deposits of Air Force Base personnel leaving the area. In addition, indirect job losses and the depressed state of the local economy may affect these institutions in other ways. Indirect job losses and reductions in total personal income will further impact deposit levels at these institutions. Financially troubled households may encounter difficulties in meeting the payments on personal, home improvement and mortgage loans made by these institutions. Delinquency and default rates may increase accordingly.

Military Retirees

If Kincheloe is closed, the approximately 250 military retirees residing in the area will have few options in taking full advantage of their retirement benefits. Because of its relatively isolated location, Kincheloe is approximately 175 miles from any other major military facility which can provide services. Medical services could be obtained in the area at civilian hospitals utilizing the CHAMPUS program, however, use of commissary, exchange and other base services would effectively be terminated.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

The one airline company providing air passenger and freight service to Sault Ste. Marie would experience some revenue loss as a result of base closure. It is estimated that North Central Airlines would lose approximately \$194,000 annually in revenues attributable to air freight shipments from the base and the travel of personnel. No estimates are available for revenues derived from air freight shipments to the base.

Surveys by North Central have indicated that over 50 percent of their business is generated by the presence of Kincheloe AFB. If traffic decreases significantly with the closing of the base, air service will be reduced. However, at the minimum, North Central will continue to provide two arrivals and two departures per day. Chippewa Flying Service, which provides charter service, flying school and airplane rental would lose approximately 65 percent of their business volume if base closure were implemented.

The Federal Aviation Administration has issued a planning grant for the site location of a new City-County Airport. If Kincheloe AFB closes,

the base facilities may be examined for possible alternative use as a community airport site.

The economic loss to the Soo Line Railroad as a result of base closure would not be significant since less than one percent of the Soo's annual revenue is base-generated.

The road agency for the Kincheloe area is the Chippewa County Road Commission. The Commission receives maintenance and improvement funds from the state based on total population estimates for the area. If Kincheloe closes, the Commission could lose approximately \$181,500 in highway funds. This loss represents about 42 percent of their total annual road funds.

It is estimated that the Sault Ste. Marie bus terminal--in which the Eastern Upper Peninsula Transportation Authority recently invested \$42,000 for improvements--would lose approximately 39 percent of its annual passenger traffic and 23 percent of its freight shipments as a result of Kincheloe closing. Annual business volumes at the St. Ignace bus terminal would decline an estimated ten percent.

There are seven major moving and storage companies which would be significantly affected by the closing of Kincheloe AFB. All of these companies would close or leave the area if the base closed. Major firms, the proportion of their business attributable to Kincheloe and current employment levels are illustrated in the table on the following page.

Table III-11. MAJOR MOVING COMPANIES'
BUSINESS ATTRIBUTED TO KINCHELOE AFB

<u>Company</u>	<u>Percent of Business</u> <u>With Kincheloe</u>	<u>Number of</u> <u>Employees</u>
Frost Moving & Storage Company	85%	3
Weir Moving & Storage Company	50%	12
Dobson Cartage & Storage	99%	16
Ball Moving Company	85%	11
Stevens Van Lines	98%	18
Clairmont Transfer Company	25%	-NA-
Superior Moving & Storage	68%	8

NA: Data not available.

Source: Kincheloe Air Force Base Information Office.

The most likely long-term impact on transportation would be a reduction in the level and frequency of air and truck service to the area. The City-County Airport would remain open, but service by North Central could be reduced. The frequency of truck service as well as the number of companies operating in the area would be greatly reduced. There are no known traffic safety hazards in the area created by base personnel entering and leaving the base, but base closure will reduce traffic volume and some localized congestion.

UTILITIES (AFERN 4.4.2)

The most significant impact on local sewer and water utilities will occur in the City of Sault Ste. Marie. The city's sewer and water department currently provides services to 4,018 residential users. It is estimated that 444 off-base households residing in Sault Ste. Marie will leave the area if Kincheloe AFB is closed. Based on an average annual billing per household of \$89 which includes both sewer and water services, this department will lose about \$39,500 in annual revenues, or over 9 percent of the city's total revenue from sewer and water services (\$428,400). Impacts of base closure on water and sewer utility rates to remaining users in Sault Ste. Marie cannot

be determined at this time, but the loss could hasten the need for upward rate adjustments.

No significant impacts on the Cedarville and St. Ignace utility services are anticipated as a result of base closure. However, base closure and the resultant population loss may cause delay in construction of sewage treatment facilities planned for Rudyard and overinvestment in facilities planned for Pickford.

The Edison Sault Electric Company would lose approximately \$300,000 in annual revenues from loss of direct on-base electric utility procurements. This represents about 4 percent of the company's annual gross revenue. In addition, the company would lose customers with the loss of area households, commercial establishments, etc., that would occur if the base were to close. Long-term population and economic losses to the area could alter utility rates for remaining users but this impact cannot be quantified.

The Cloverland Electric Cooperative supplies a very limited number of off-base households with electrical power; it is estimated that no more than 1 to 2 percent of kilowatt hour sales from the Cooperative are directly attributable to Kincheloe AFB personnel. Company representatives estimate that impacts on remaining users resulting from base closure would be relatively minor.

The Michigan Consolidated Gas Company provides gas service to approximately 1,400 to 1,480 housing units on the base which represent about 18 percent of the company's Sault area total load. The revenue from base purchase of natural gas (approximately \$281,000 in 1975) would be lost if the base were closed. Partially mitigating this revenue loss is a written guarantee entitling Michigan Consolidated Gas Company to receive a liquidation payment for initial cost of facilities. The original payment was an amount not to exceed \$375,000 but this figure

would be adjusted downward based on the length of time the company's facilities have been in use.

To serve Kincheloe AFB, Michigan Consolidated Gas Company was franchised to provide service to nonmilitary customers in Kinross Township. This service includes about 78 accounts; it is estimated that only 10 to 20 of these are permanent residents. If the base were closed, the distribution facilities in Kinross Township would be greatly in excess of those required to serve these remaining customers. These accounts would therefore become an economic burden to the company.

General Telephone Company of Michigan provides telephone service to five communities in the Eastern Upper Peninsula including Cedarville, Detour, Kinross, Pickford, and Rudyard. Much of this company's past investment has been directed toward facilities to serve Kincheloe personnel including about \$2.5 million in investment to the Kinross exchange. A company representative estimated that providing service to military and civilian base personnel represents about 43 percent of the company's total subscribers. Closure of Kincheloe AFB would constitute a significant impact on this company, including a loss in annual revenue of about \$650,000.

Michigan Bell Telephone Company provides service lines to the base and would lose an estimated \$180,000 in annual revenue as a result of base closure. In addition, toll revenue from calls placed by base personnel through the Kinross exchange represents an important source of revenue. A company representative estimated that 300 accounts are held by off-base military households in the area; based on an average billing of \$540 per year, these accounts constitute an additional loss in revenue of \$162,000. While rates to remaining users would not be expected to change as a result of base closure, the installation of direct dialing equipment into the area could be delayed.

The base accounts for approximately 85 percent of the sales of coal by Reiss Coal Company, or \$1.1 million in annual revenue. Closure of the base would force closure of this coal company and remaining users (some local and regional schools and domestic customers) would probably have to convert to oil or gas.

Northwestern Oil Terminal Company of St. Ignace stores approximately 515,000 barrels of liquid fuel (JP4-jet petroleum number 4) which is used solely by Kincheloe AFB. The storage tanks hold enough fuel to serve the entire upper peninsula--far too much fuel for any civilian use. The exact financial loss to this company has not been determined, but the cost for reproducing a plant of similar size is about \$3 million. Another company that would be impacted if the base closes in Northern Michigan Pipeline Company which is owned by Park-Ohio Industries of Cleveland, Ohio. The sole purpose of this company is to transport the liquid fuel from the storage tanks of Northwestern Oil Terminal Company in St. Ignace to the base. This is approximately a \$2 million operation that would have little or no alternative use if the base closed. There would be no significant effects on services provided to local residents as a result of impacts to these companies.

Petrolane Gas Service is dependent on on-base government contracts for about 15 percent of their total sales of liquid petroleum; sales to off-base personnel constitute an additional 10 percent of this company's total sales volume, for a total of about 25 percent. However, the losses in revenue to this company will not affect rates to remaining customers.

Losses in annual revenue to Cities Service Oil Company of \$50,000 to \$60,000 would represent 10 to 12 percent of this company's total annual revenue. A company representative estimated it would require about 2 years for this business to recover from this financial setback. However, rates to remaining utility users would not be affected by closure of the base.

The Superior Sanitation Company of Sault Ste. Marie will lose about \$62,400 annually, or 15 percent of this company's total annual revenue, from loss of government procurement for refuse collection if Kincheloe AFB were closed. Households of personnel residing off-base constitute additional users who will be lost to this company. No reduction in service to remaining customers would be anticipated.

LAND USE (AFERN 4.4.3)

Refer to Chapter II of this statement.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Implementation of the candidate action would reduce air operations to zero at Kincheloe AFB.

COMPARISON OF MAJOR STUDY SUBMITTAL

The Kincheloe Impact Special Study (KISS) was conducted by members of the faculty at Lake Superior State College. The purpose of this study was to assess the impact of Kincheloe AFB on the economy of the Eastern Upper Peninsula of Michigan and the effects which its closure might have.

In this section, the major findings of the KISS report are compared with those presented in the Final Environmental Impact Statement (FEIS). This comparison will be limited to key socioeconomic descriptors and focus primarily on employment, population, housing and retail sales.

Employment

The KISS report estimates that the unemployment rate resulting from the closure of Kincheloe AFB could range from 25.1 percent to 28.9 percent. This is the rate which would be experienced throughout the three-county

Eastern Upper Peninsula, the designated regional planning and labor market area. In the Summary, it is estimated that Chippewa County would experience an unemployment rate of about 40 percent. This was derived by applying a factor of 95.4 percent to the total resultant unemployment figure of 2,534 developed in the report. Application of this factor, derived by a gravitational model, yielded resultant unemployment of 2,417. In the FEIS it was estimated that the unemployment rate for Chippewa County would be 31.9 percent. This rate reflects the out-migration of Civil Service Personnel.

The KISS report utilized a methodology which placed heavy reliance upon economic modelling. In the report, three models -- business sector, household sector and government sector -- were developed to measure the impact of Kincheloe AFB on the economy of the three-county Eastern Upper Peninsula. A sub-model of the overall household model was utilized to estimate optimistic and pessimistic unemployment rates. These rates were based on varying assumptions of job loss and out-migration. This methodology was utilized after the calculation of employment multipliers using linear regression techniques yielded statistically invalid results. The multipliers calculated under this technique could have ranged from 1.1 to 2.3.

Population

The KISS report does not directly address the magnitude of population loss associated with the proposed closure of Kincheloe AFB. Rather, the magnitude of population losses is incorporated as a function in several of the alternative model variables.

Housing

The KISS study placed much of its emphasis on real estate values. However, through their surveys, the study team was able to obtain some indication on the possible level of vacancies which would result if

Kincheloe were closed. According to a KISS survey, a total of 484 military personnel owned or rented their homes in the three-county impact area. It can be implicitly assumed that these units would be vacated and would be supplemented by other direct and indirect civilian vacancies. A resultant vacancy rate in the range of 25%-50% was indicated.

Retail Sales

By utilizing the business model, KISS estimates the impact of Kincheloe AFB personnel on business expenditures in the impact area. Because of the level of variable aggregation, it was not possible to distinguish the expenditures made for retail sales from total personal expenditures in area businesses.

B. Blytheville Air Force Base Area

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.0)

The alternative action should not generate significant adverse effects, nor alter the fundamental physiographic, geological, and soil characteristics and properties of the area. The soil is sufficiently fertile to support adequate vegetal cover, and has been managed to maintain such cover. Allowing it to revert to a natural state may actually enhance erosion protection. Surface and sub-surface conditions should remain unchanged since construction projects are not involved. Solid waste and refuse generation should decrease. The overall effect should be minimal, and the useful life of sanitary landfills in the area should be extended.

WATER (AFERN 3.2)

A decrease in demand on water and sewerage facilities on-base and in the civilian community would occur. On-base waste water discharges would be eliminated. While the effect on effluent receiving waters should be favorable, there are no existing discharge problems.

AIR (AFERN 3.3)

Air quality in the environs of Blytheville AFB probably will be improved as a result of the alternative action. A decrease in air pollutant emissions on base and in the civilian community would be anticipated. The decrease on base would result directly from the elimination of aircraft operational activity and stationary emissions.

BIOTIC ENVIRONMENT (AFERN 3.4)

The proposed action may have an initial slight negative impact on the biota but recovery should occur within a few months and a long-term beneficial impact should result. Presently there are no major game or wildlife programs in being at Blytheville. There are no records of occurrence for any rare, threatened or endangered species of plants or animals on base property.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1.1)

As an alternative to the closure of Kincheloe Air Force Base, Michigan, the Blytheville Air Force Base would be closed and totally inactivated. This would result in the direct loss of 2,830 military personnel and 617 civilian personnel that were employed on the base as of March 31, 1976. A summary of the alternate personnel reduction at Blytheville is presented in the table below.

Table III-12. SUMMARY OF PROPOSED PERSONNEL REDUCTION
AT BLYTHEVILLE AFB

	<u>Military</u>		<u>Total</u>	<u>Civilian</u>		<u>Total</u>	<u>Total Personnel</u>
	<u>Officers</u>	<u>Airmen</u>		<u>DAF</u>	<u>NAF</u>		
Assigned as of 3-31-76	454	2,376	2,830	417	200	617	3,447
Number to be Reduced	<u>454</u>	<u>2,376</u>	<u>2,830</u>	<u>417</u>	<u>200</u>	<u>617</u>	<u>3,447</u>
Residual after Action	0	0	0	0	0	0	0

Source: Description of Proposed Action and Alternatives,
Headquarters, Strategic Air Command, Directorate
of Plans, Policy and Programs.

If the Blytheville alternative closure action is implemented, population losses throughout the Primary Impact Area but particularly in the Blytheville/Gosnell area can be anticipated. As a direct result of base closure, approximately 2,800 military personnel would be transferred to other installations and depart from Mississippi County. It is more difficult to predict the behavior of base civilian employees terminated by the closure action.

Some Civil Service employees nearing retirement age may take early retirement and remain in the area. Other employees may be secondary wage earners whose spouses retain their jobs in the civilian sector; some such households may remain in the area. Some civilian employees with strong roots and family ties in the area may remain when their jobs are terminated and collect unemployment compensation until new employment opportunities are found or unemployment benefits run out. Still others may decide to move and seek employment in other Arkansas counties or be placed by the Civil Service in positions elsewhere in the country.

As the economic impact of the base closure reverberates through the local economy, indirect population losses will undoubtedly occur. As noted in the following section on employment measures, approximately 1,400 jobs in the civilian sector of the economy may be lost as an indirect result of the base closure. The holders of these jobs will likewise face the decision whether to remain in the community collecting unemployment benefits and seeking alternative employment opportunities or move with their families to seek jobs elsewhere. With no previously documented experience upon which to base estimates, indirect population losses can certainly be anticipated but the quantitative magnitudes cannot be predicted with any reasonable degree of certainty. Therefore, for purposes of this analysis, only direct population losses have been computed.

Based on previous experience at other Air Force Base installations, the following assumptions have been made regarding direct population losses:

- o All military personnel and their dependents would leave the Primary Impact Area;
- o Sixty-two percent of Appropriated Fund personnel and their dependents would leave the area and relocate in other jurisdictions outside the Primary Impact Area;
- o The residual 38 percent of the Appropriated Fund personnel and all the non-appropriated Fund employees would remain in the community along with their dependents.

In applying these assumptions, the combined Blytheville/Gosnell area would lose approximately 28 percent of its 1976 baseline population as a direct result of Air Force Base closure. Estimated direct population losses for all the impact areas are presented in the table below.

Table III-13. ESTIMATED DIRECT POPULATION LOSS, BLYTHEVILLE
AIR FORCE BASE IMPACT AREAS

	<u>1976 Baseline Population</u>	<u>Estimated Direct Population Loss</u>	
		<u>Number</u>	<u>Percent</u>
<u>Primary Impact Area:</u>			
<u>Mississippi County</u>			
Blytheville/Gosnell	27,100	7,610	28.1%
Blytheville AFB	(3,870)	(3,870)	(100.0)
Balance of Area	<u>(23,230)</u>	<u>(3,740)</u>	<u>(16.1)</u>
Subtotal	27,100	7,610	28.1%
Balance of County	33,400	70	0.2%
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>60,500</u>	<u>7,680</u>	<u>12.7%</u>
<u>Other Impact Areas:</u>			
<u>Pemiscot County</u>			
Pemiscot County	26,900	80	0.3%
<u>TOTAL OTHER IMPACT AREAS</u>	<u>26,900</u>	<u>80</u>	<u>0.3%</u>

Source: Hammer, Siler, George Associates

The departure of nearly 7,700 personnel and their dependents would result in a total population loss of 12.7 percent for Mississippi County as a whole. These losses would be concentrated in the Blytheville/Gosnell area. In percentage terms, the combined area would lose 30 percent of its current population. While the Air Force Base itself accounts for somewhat over half the losses, the departure of 3,740 off-base personnel and their dependents would result in a 16 percent reduction in total off-base population.

Even in measuring only the direct population loss associated with closure of Blytheville Air Force Base, the action would severely impact Mississippi County and its major urban center. The impact on population would be compounded significantly by indirect population losses but these cannot be reliably estimated or quantified.

ECONOMIC CHARACTERISTICS (AFERN 4.2)

EMPLOYMENT (AFERN 4.2.2)

The alternate action at Blytheville Air Force Base would result in both direct and indirect employment losses. Transferred or terminated military and civilian personnel assigned to the base represent the direct employment losses. The elimination of these jobs and the termination of other base influences such as procurements and other purchases in the local economy would reverberate and have secondary job loss effects. These indirect job losses would occur in several ways.

Both civilian and military personnel at the base eat in local restaurants, buy clothing and other goods from local retail establishments and purchase at least some grocery items from local supermarkets. With the departure of base personnel and their dependents, retail sales will diminish and local retailers may be forced to reduce employment levels.

Similarly, the termination of base procurement and construction awards to local firms may also affect employment levels at these establishments. Utility companies, public school systems, local governments and other employers in the area may likewise be forced to lay off employees because of diminished activity resulting from base closure. Some small businesses and others now only marginally profitable may be forced to liquidate and go out of business entirely. These impacts will continue to ripple throughout the local economy in a variety of subtle ways and have a total cumulative impact on total employment in the civilian sector.

In order to measure the magnitude of these indirect losses, employment multipliers were developed for the Blytheville AFB Primary Impact Area. Two separate multipliers have been derived: a civilian multiplier and a military multiplier. The civilian multiplier represents the mathematical relationship between civilian personnel working on the base and total employment in the civilian sector of the local economy as a whole. Reflecting their incomes and expenditure patterns within the local civilian sector, the multiplier derived for the Blytheville Primary Impact Area suggests that for every one civilian employee at the base another .56 jobs in the civilian sector are attributable to civilian employment on the base.

Because of on-base housing, BX and commissary privileges, the average military man spends less in the civilian sector of the economy. The military multiplier developed for the Blytheville Primary Impact Area indicates that for every uniformed military person assigned to the base, .36 jobs in the civilian sector are attributable to military personnel levels at Kincheloe.

It is estimated that the 3,447 direct job losses to be experienced by the closure of Blytheville Air Force Base would generate an additional 1,365 indirect job losses. Those losses were estimated by using the net multiplier of .56 for each direct civilian job loss and a net multiplier of .36 for every direct military job loss associated with the proposed

realignment. Taken together, the 4,812 job losses to be experienced due to the closure of Blytheville Air Force Base will represent a loss of 19.5 percent of total employment.

Table III-14. SUMMARY OF DIRECT AND INDIRECT
EMPLOYMENT LOSSES IN THE BLYTHEVILLE
AFB PRIMARY IMPACT AREA

<u>Direct Employment Loss</u>	<u>Number of Jobs</u>
Military	2,830
Civilian	617
Subtotal	<u>3,447</u>
<u>Indirect Employment Loss</u>	
Military (Net multiplier of .36)	1,019
Civilian (Net multiplier of .56)	346
Subtotal	<u>1,365</u>
<u>Total Employment Loss</u>	4,812
Percent of Total Baseline Employment ^{1/}	19.5%

^{1/} Includes both civilian and military employment.

Source: Description of Proposed Action and Alternatives, Headquarters, Strategic Air Command, Directorate of Plans, Policy and Programs; and Hammer, Siler, George Associates

These indirect employment losses will be concentrated in the Trade; Finance, Insurance, and Real Estate; and Services sectors. They will occur among both the 'front-line' employment (i.e., procurement-related) and ancillary employment (i.e., retail clerks) positions. In addition, the Transportation, Communication and Utilities sector will experience employment losses among the numerous moving and storage firms which rely heavily upon the base for their support.

In a report prepared by Arkansas State University - - "The Economic Impact of the Proposed Closure of Blytheville Air Force Base" - - a combined civilian/military multiplier of 1.17 was derived. Though derived in a somewhat different fashion, the severity of the impact

is roughly comparable with that presented here.

Unemployment

If the alternate action were implemented, the civilian labor force would be reduced from 23,475 to 23,247 persons based on the assumption that approximately 62 percent of the Appropriated Fund Civilian employees living within the Primary Impact Area would relocate. When added to the existing unemployment situation, the job losses attributable to Blytheville AFB closure would result in total unemployment of 3,397 persons or 14.6 percent of the total civilian labor force. Both pre-action and post-action unemployment rates and civilian labor force figures are presented in the following table.

Table III-15. CIVILIAN LABOR FORCE AND UNEMPLOYMENT
IN THE BLYTHEVILLE AFB PRIMARY IMPACT
AREA

March 31, 1976 Baseline

Civilian Labor Force	23,475
Total Unemployed	1,700
Unemployment Rate (1975 Annual Avg.)	7.2%

Post-Action

Civilian Labor Force	23,247
Total Unemployed	3,397
Unemployment	14.6%

Source: Arkansas Employment Security Division; and Hammer, Siler, George Associates

Because of the residential distribution of these employees, the communities of Blytheville and Gosnell will be most seriously impacted. This loss of employment will have repercussions which will be felt throughout the economies of these two cities. In addition to impacting the overall economy, the closure of Blytheville AFB would be particularly detrimental to the minority employment situation. Because of their representation in the labor force, it is estimated that approximately

30 percent of those persons becoming unemployed will be minority group members.

The Arkansas State University report projected an unemployment rate of 21.9 percent in Mississippi County following base closure. Based on different assumptions that projected unemployment rate is 50 percent higher than the one presented here (Refer to Comparison of Major Study submittal page 140).

Total Personal Income

Total personal income in the Mississippi County Primary Impact Area totalled approximately \$282 million in calendar year 1975. As illustrated in the table below, base payrolls represented approximately 12 percent of this total.

Table III-16. BASE PAYROLL CONTRIBUTION TO TOTAL
PERSONAL INCOME IN THE BLYTHEVILLE AFB
PRIMARY IMPACT AREA

1975 Total Personal Income	\$282,000,000
Annual Base Payrolls	34,606,000
Percent of TPI	12.3%

Note: Values expressed in 1975 constant dollars.

Source: Local Area Personal Income, U.S. Department of Commerce, Bureau of Economic Analysis; and Hammer, Siler, George Associates

If closure of Blytheville AFB were implemented and its payroll contribution to the community terminated, the economy of Mississippi County would experience not only a direct loss of 12.3 percent of its total personal income but an additional decline in income due to indirect job losses. Should the proposed closure of Blytheville AFB be implemented, the Primary Impact Area economy will experience a loss of \$7.6 million in personal income as a result of indirect job losses. This was estimated by applying a median earnings per worker figure of \$5,569 for the impact area to the 1365 indirect job losses.

In its report, however, Arkansas State University projected total direct

and indirect losses in local income attributable to payrolls, procurements and other factors totalling \$101.6 million.

Retail Sales

To determine current spending by base personnel in civilian sector retail establishments and to estimate the direct impacts of base closure on total retail sales, the total annual retail expenditure of base personnel was derived by applying a retail sales expenditure factor to total base payroll. Actual sales at the Blytheville AFB commissary, exchange and clubs was subtracted from the total expenditure potential to indicate the amount spent in civilian sector establishments. This methodology overstates the contribution of base personnel to civilian retail sales in the area somewhat since some purchases were undoubtedly made in other areas. As a "worst case" methodology, however, it expresses the maximum possible direct impact of base personnel on local retail sales and the loss that would accompany base closure.

Table III-17. ESTIMATED DIRECT IMPACT OF BLYTHEVILLE AFB
PERSONNEL ON RETAIL SALES IN THE PRIMARY IMPACT AREA

Total 1975 Primary Impact Area Retail Sales	\$160,604,000
Maximum Attributable to Base Personnel	10,454,280
Percent of Total	6.5%

Source: Bureau of Labor Statistics, U.S. Department of Labor; Survey of Buying Power, 1976; Tab A-1 (revised) BAFB; and Hammer, Siler, George Associates

Base personnel accounted for a maximum of \$10.5 million in retail sales at Primary Impact Area establishments, 6.5 percent of total reported sales. If retail sales were to decline 6.5 percent following base closure, it is anticipated that a number of employees would be laid off and that some small businesses, especially those catering to base personnel, would go out of business. The loss of these jobs is accounted for in the multiplier used to express total indirect job losses.

PUBLIC FINANCE (AFERN 4.2.3)

If Blytheville AFB were closed, a variety of realignments in public revenues and expenditures would ensue. These impacts would be evident at both the state and local levels. Because of the formulas often used in the assessment of state and local revenues as well as the variety of complicated formulas used in the apportionment of federal and state funds among constituent jurisdictions, few of the revenue and expenditure impacts can be evaluated in detail. Only one of them can be quantified with any degree of confidence: as reported under AFERN 4.3.3, public school revenue losses from federal and state sources have been estimated.

Apart from these fiscal impacts on local school system revenues, other major sources of state and local revenues will be affected even if the dollar values cannot be quantified with certainty: income and sales taxes, federal revenue sharing and state "turnback" payments as well as local ad valorem real property taxes. At the state level, the two major sources of revenue that would be affected are the personal income tax and the sales tax.

Income and Sales Taxes

Since many military personnel assume one permanent place of residence for tax purposes throughout their careers, transfer from Blytheville AFB to other bases in the country will not have a major impact on state income tax revenues. The income tax loss from terminated civilian employees and indirect job losses may be more severe even if their numbers are smaller. These impacts cannot, however, be quantified.

State sales tax losses attributable to direct impacts of base closure can at least be approximated. Based on the estimated \$10.5 million spent by base personnel at retail establishments in the civilian sector the state derives approximately \$314,000 annually in sales tax revenues

from base personnel at its three percent taxing rate. Even as a "worst case" example, this loss in sales tax revenues represents approximately one-tenth of one percent of total state sales tax collections of \$210 million in 1975.

Unemployment Compensation

A base closure would create both direct and indirect job losses. In most cases, these unemployed personnel would be eligible for unemployment compensation benefits. An unemployment compensation benefit program is actually an insurance program which by design is intended to be wholly supported by the mandated contributions of the private and public sector employers who participate in the state-administered program. Although unemployment benefits are paid through a state program, the funds utilized originated with the employers whose contributions are "banked" until needed. Any overdraw against contributions banked must be repaid to the state in the future.

At this point in time the number of people finding new jobs in the area increasing their average daily commuting distances to take jobs outside the area, or relocating to other areas cannot be accurately projected. In this analysis, then, the total unemployment benefit program impact -- or cost -- was not developed. The maximum cost for unemployment benefits to federal civilian employees whose job losses would be a direct result of a base closure would be: (52 weeks) x (\$100/week) x (617 civilian jobs), or \$3.2 million.

Local Revenues Sources

At the local level, the closure action would have a more pronounced impact on fiscal affairs. Federal revenue sharing, state revenue turnback and ad valorem taxes are among the revenue sources that would be affected.

Title I of the State and Local Fiscal Assistance Act of 1972 (Revenue Sharing) provides for the distribution of federal funds to units of local government. The amounts to be distributed to each unit of government are determined by applying a set of formulas to descriptive data pertaining to each unit. These formulas utilize population, per capita income, adjusted taxes and inter-governmental transfer as their basic data elements and are used to determine each government's share of the total amount. The resulting computations distribute available funds among all eligible units of local government on a national basis. While the closure action will undoubtedly alter many of the measures drawn upon in the allocation formula, the Office of Federal Revenue Sharing in the U.S. Treasury Department has stated that no reliable estimates of the impacts on a local government can be made. In part, this is due to the nature of the allocation process: the effect of changes in one local area is dependent upon comparisons with all other eligible units of local government in the U.S. Even estimated direct changes in population are not a reliable indicator since this factor in the formula is important only within certain minimum and maximum thresholds concerning per capita income.

In sum, estimated changes in revenue sharing based on per capita amounts do not reflect the characteristics of the distribution formula and no other reliable method of gauging the impacts is available. While federal revenue sharing funds may diminish, it is impossible in this analysis to predict the amounts or order of magnitude. Even though this is the case, both the State Revenue Office and the Arkansas Department of Treasury have made estimates of potential revenue losses. According to these sources, Mississippi County would lose approximately \$180,000 in Federal Revenue Sharing and \$34,000 in general revenue turnback appropriations.

In addition to the probable losses of revenues from these sources, both Blytheville and Gosnell would experience losses of other local revenues. In Gosnell, where a major source of revenue is receipts from the water

and sewer system, it has been estimated that approximately 50 percent of this revenue would be lost if the base closed. This could cause the Gosnell Water Association to default in its approximately \$630,000 in outstanding sewer revenue bonds. In Blytheville, the present 3.5 mill tax rate -- this is the only city in the state not taxing at its constitutionally set maximum of 5 mills -- would in all likelihood have to be increased.

Also, most public services and systems are planned using population projections. Therefore, charges for services and systems are computed under the assumption that they will be fully utilized. A reduction in population will result in either underutilization of the services and systems or an increase in charges which again must be assumed by those who remain in the community.

Real estate property taxes are the single largest source of revenue for most units of local government. While real estate values in the market place will undoubtedly diminish, it is not certain that property tax revenues will necessarily decrease. This depends upon local government operating costs and budget requirements, changes in assessed values or the effective tax mill rate.

To some extent, the departure of base personnel and their dependents as well as other indirect population losses may diminish the demand for certain types of public services. However, many operating costs in local government are "fixed" and cannot be readily adjusted to reflect changes in the population level. In continuing to meet operating costs, the same or only slightly diminished amounts of property tax revenues may be required by the local governments most significantly impacted by base closure.

In the face of a depressed real estate market and diminished values, local governments have several options in closing the gap between revenue requirements and the value of their real estate tax base:

institute new types of taxes, alter the assessment/market value ratio used in levying real estate taxes or raise the real estate tax rate itself. Whatever options they pursue, local government decisions will undoubtedly increase the tax burden on remaining households in one way or another.

BASE PROCUREMENT (AFERN 4.2.4)

Were the base to close, the Mississippi County Primary Impact Area would lose approximately \$6.1 million annually in non-construction procurements and its contract construction firms would lose over half a million dollars on an average annual basis. In combining both non-construction procurements and average annual construction awards, the Mississippi County Primary Impact Area would lose approximately \$6.8 million annually. These are summarized in the table below.

Table III-18. ESTIMATED ANNUAL LOSS IN CONSTRUCTION AND PROCUREMENT AWARDS, BLYTHEVILLE AFB PRIMARY IMPACT AREA

<u>Procurement Type</u>	<u>Amount</u> (\$000)
Non-construction Procurements	\$6,076.3
Average Annual Construction Awards	<u>697.1</u>
Total	\$6,773.4

Source: Hammer, Siler, George Associates

HOUSING (AFERN 4.2.5)

Closure of Blytheville Air Force Base would have both short-term and long-term effects on the previously healthy housing market in the Primary Impact Area. Even the announcement that Blytheville may be closed has had an immediate impact. In the atmosphere of uncertainty, developers have cancelled planned projects, financial institutions are reluctant to initiate new mortgage commitments and construction loans while consumers themselves are hesitant to make the financial commitments involved in purchasing a new home. In this current state of un-

certainty, the housing market has come to a virtual standstill and the inventory of unsold units on the market continues to mount.

If the Air Force Base is closed, the impact on the community housing market would be severe. Departing military and civilian personnel currently living in off-base housing would place their vacated units on the market and increase the vacancy rates substantially. Those losing their jobs as an indirect result of base closure may be confronted with several problems. Homeowners may wish to relocate to other areas but have difficulty selling their homes. If they remain in the area and collect unemployment benefits, terminated employees may have difficulty meeting rent and mortgage payments. As a consequence, mortgage delinquency rates may increase and unless the homeowner has substantial equity in the unit, mortgage default rates may likewise increase somewhat.

As a consequence of both direct and indirect impacts, the housing market in the Primary Impact Area will be depressed. Even those who retain their jobs and could afford to buy new housing may be discouraged from doing so by the general uncertainty concerning the future of the area and the general "depression" mentality. If homes are sold at all, prices will undoubtedly be depressed but it is impossible to predict the relative decline in values with any degree of certainty. In the short run, certainly, supply would far exceed demand. To some extent, continued growth in the civilian economy may absorb some of the vacated units but the period until market equilibrium is regained would be protracted.

In measuring the quantifiable effects of base closure on the housing market, only the increase in vacancies attributable to direct civilian and military household losses can be computed. These are presented in the table below.

Table III-19. ESTIMATED DIRECT IMPACT OF BLYTHEVILLE
AFB CLOSURE ON HOUSING MARKET VACANCIES IN
THE PRIMARY IMPACT AREA

	<u>Blytheville/ Gosnell</u>	<u>Balance of Mississippi County</u>	<u>Total Primary Impact Area</u>
1976 Baseline Vacant Units for Sale or Rent	333	359	692
Units Vacated by Departing Personnel	<u>1,334</u>	<u>26</u>	<u>1,360</u>
Total Post- Action Vacant Units for Sale or Rent	1,667	220	2,052
Post-Action Market Vacancy Rate	19.5%	2.1%	10.0%

Source: Hammer, Siler, George Associates

As a direct result of military and civilian base personnel leaving the Primary Impact Area, it is estimated that over 1,300 owner-occupied and rental units will be placed on the market. This will triple the number of vacant units for sale or rent within the county as a whole and increase the market vacancy rate substantially to approximately 10 percent. The Blytheville/Gosnell area will be particularly impacted. There the number of vacant units on the market will increase five-fold and boost the vacancy rate from a four percent level to a 19.5 percent rate.

While these increases in the market vacancy rate are dramatic, they only represent those attributable to direct household losses and do not begin to account for other indirect job losses and departures from the region. Such secondary impacts will certainly compound the market vacancy rates and add to the severity of depressed housing market conditions, particularly within the Blytheville/Gosnell area.

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

Present forms of government and jurisdictional boundaries of the communities of Blytheville and Gosnell as well as Mississippi County are not expected to change as a result of closure of Blytheville AFB. However, impacts on the local governments of Blytheville and Gosnell which result from impacts on public finance, municipal and community services and facilities, and public schools will be significant.

The economic, social, and cultural losses that Blytheville and Gosnell will sustain will necessitate some changes in the emphasis of governmental operations. During the transition period following base closure, the mayor and city council of Blytheville will likely assume greater importance. At the same time, both financial and labor resources needed for government services will be strained. As an example, a number of base employees as well as their spouses and dependents hold jobs in the communities surrounding the base. Although no base employees have government jobs as their second jobs, 55 of their dependents hold government jobs. With the closure of Blytheville AFB government agencies will experience a loss of manpower.

Long-range planning in the area surrounding Blytheville AFB will be affected by the population and economic losses sustained. In the past planning has been tied to the presence of the base and the needs of the personnel associated with the base. Planning agencies will have to adjust future policies, programs, and revenues significantly as a result of the closure of the base.

EDUCATION (AFERN 4.3.3)

Two school districts in Mississippi County would be impacted if Blytheville AFB were to be closed: the Gosnell School District, which includ-

es the base itself; and the Blytheville School District. These two districts contain the students from 97 percent of Blytheville AFB related households. Base closure would result in enrollment losses, funding losses, employment losses, and under-utilization of facilities.

Blytheville AFB dependents represent 1,421 students, or 19.6 percent of the total 7,242 students enrolled in the two school districts which would be impacted by the proposed base closure action. Of the two, Gosnell contains 80 percent of the base-related students. As shown in the table below it is estimated that Gosnell would lose 1,099 or 65.7 percent of its 1,673 students. Blytheville schools are estimated to lose 190 students, or 3.4 percent of their enrollment. The remaining Blytheville AFB dependents are distributed in numerous communities throughout Arkansas, Missouri and Tennessee.

Table III-20. IMPACT ON PUBLIC SCHOOL ENROLLMENT,
BLYTHEVILLE AFB

<u>School District</u>	<u>1975-76 Total Membership</u>	<u>AFB Dependents</u>		<u>Total</u>	<u>Estimated Loss</u>			<u>Percent</u>
		<u>Type A</u>	<u>Type B</u>		<u>Type A</u>	<u>Type B</u>	<u>Total</u>	
Gosnell	1,673	959	183	1,142	959	140	1,099	65.7%
Bytheville	5,569	0	279	279	0	190	190	3.4%
Total	7,242	959	462	1,421	959	330	1,289	17.8%

Source: Office of Education, U.S. Department of Health, Education & Welfare; Superintendent of Blytheville Public Schools; and Hammer, Siler, George Associates

Two funding sources for local public schools would be directly affected by base closure: Public Law (PL) 81-874 funds to areas impacted by federal facilities and state supplementary aid.

The Gosnell School District received \$535,930 in PL-874 funds based on the Average Daily Attendance (ADA) of AFB dependents. Blytheville schools received \$71,170 in PL-874 funds. Section 3(e) of the law

provides for 90 percent funding of school districts in which there has been a decrease in federal activities, in which total ADA was under 90 percent of the previous year's ADA and in which the ADA of base dependents equalled at least 10 children and 10 percent of the total enrollment. Under these criteria, only the Gosnell School District would be eligible for continued federal aid at a reduced rate. The PL-874 payments to the Blytheville School District would be discontinued, resulting in an estimated revenue loss of \$71,170. PL-874 impact aid funds for Gosnell would continue at 90 percent of the previous fiscal year until 1978, when the current law expires. If extended, aid would continue for the three years following implementation of the proposed action.

At the time federal impact aid is discontinued, the Gosnell School District will experience a revenue loss of \$535,930. Additional revenue losses would occur as state-aid would be reduced. It is estimated the Gosnell and Blytheville schools would lose \$441,980 and \$58,695, respectively in state aid. Losses from PL-874 sources and state aid would total \$977,910 in Gosnell and \$129,865 in Blytheville. These are presented in the table below.

Table III-21. ESTIMATED FUNDING AND EMPLOYMENT LOSSES
TO PUBLIC SCHOOLS, BLYTHEVILLE AFB
PRIMARY IMPACT AREA

<u>School District</u>	<u>Estimated PL-874 Funds Loss</u>	<u>Estimated State Aid Loss</u>	<u>Total Estimated Fund Loss</u>	<u>Estimated Teachers/Support Employee Loss</u>
Gosnell	\$535,930	\$441,980	\$977,910	72/29
Blytheville	71,170	58,695	129,865	10/7
Total	\$607,100	\$500,675	\$1,107,775	82/36

Source: Office of Education, U.S. Department of Health, Education & Welfare; Superintendents of Gosnell and Blytheville School Districts; and Hammer, Siler, George Associates

Insofar as a school district's operating expenses are unlikely to be

reduced proportionately to enrollment losses, it is likely that local districts may be required to request increased tax mill rates as a compensatory measure. As a result of the projected enrollment decrease, the teaching and support staffs of the school district would be reduced. The Superintendent of the Gosnell School district anticipates employment reductions proportionate to enrollment decline. This means that 101 teachers and support personnel would become unemployed.

In the Blytheville school system, a total of 17 people, 10 of which would be teachers, would probably become unemployed. However, as 26 teaching positions and 15 support staff positions are held by base-connected personnel, it is possible that the district could "re-employ" 24 personnel from the Gosnell schools. The Gosnell schools, grades K through 12, are located in a campus setting across from the Air Force base. If enrollment were reduced by almost 66 percent, the number of classrooms required would be significantly reduced. Whether or not the physical distribution of grades and classrooms could be altered in order to close one of the buildings has not been resolved.

Among institutions of higher learning, Mississippi County Community College (MCCC), founded in 1975, is still in an active development role and relies heavily upon base resources. In addition to drawing upon the base for students, instructors and supporting staff, MCCC has plans to initiate a nursing program with help from the Base Hospital. Closing the base would not only jeopardize such programs but seriously cut into overall enrollment as well.

MEDICAL (AFERN 4.3.4)

If Blytheville Air Force Base were closed, several impacts would be felt in the medical sector. First, the \$12.5 million expansion program currently being undertaken by area hospitals would be seriously jeopardized. This expansion, which is 50 percent complete, is being financed by revenue bonds which were issued on the assumption that

Blytheville Air Force Base would continue to provide a major population base and revenue source. With approximately 60 to 65 percent of its current case load coming from Medicare or Medicaid recipients, a base closure would cause the hospital system to experience considerable difficulty in obtaining the revenues necessary to amortize its debt.

Second, if the base were to close, the system would experience the loss of valuable personnel. Presently, there are approximately 30 military dependents working at Chickasaw Hospital alone. The majority of these persons are in highly skilled positions (i.e., registered and licensed practical nurses) and would be difficult to replace if lost.

Finally, the closure of the base and its medical facilities would undermine a medical situation which is only now being resolved. With the new expansion program underway and the interchange of ideas between civilian and military physicians, Mississippi County is in the process of pulling itself out of the bottom segment (70th out of 75 counties in 1973) of Arkansas counties in terms of the provision of health services. Closing the base would impede progress now being made.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

If the alternate closure of Blytheville Air Force Base were implemented, several negative impacts would be experienced in the community services and facilities sector.

First, the several cooperative agreements between the base and local communities with regard to police and fire protection would be effectively terminated. In addition to the various mutual agreements between the Base Security Police and several local and state police departments the formal mutual aid agreements between the Base Fire Department and the Blytheville and Gosnell Fire Departments will cease. In the case of Gosnell, which has only a volunteer fire department, the proposed closure would result in a serious financial blow which could negatively

impact the level of fire protection.

Second, the proposed closure would seriously impact organizations which now depend on Air Force personnel to provide both physical and financial support. Among these organizations are the numerous churches, civic organizations and charities which now operate in Mississippi County.

If Blytheville AFB were to close, several impacts would be felt by local financial institutions. There would be a substantial loss of the deposit base at these institutions. This loss of deposits could possibly cut into the reserve positions of these institutions and adversely affect their ability to make other loans. In the opinion of local leaders, the proposed closure could result in increased installment loan defaults. Such defaults would lead to increased foreclosures and repossessions which would in turn lead to increasing surpluses of residential and commercial property. Finally, the immediate losses imposed by a base closure plus an extended delay in recovery time due to the 'depression psychology' may result in temporary insolvency.

Military Retirees

Military retirees residing in the area would have to turn elsewhere in taking full advantage of their retirement benefits. Blytheville is not located relatively close to any other major military facility which now provides these services. Medical services could be obtained in the local area at civilian hospitals utilizing the CHAMPUS program, however, use of alternative commissary, exchange and other base services would require travel to Memphis, Tennessee or Little Rock, Arkansas.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

The economic loss to airline companies as a result of base closure would not significantly alter services to remaining users given the high volume of passenger traffic and air freight operations at the Memphis Airport. Similarly, elimination of the use of the defense rail switch would have no significant impact on rail transportation. There will be no significant effects on other area rail transportation.

There are two locations in the Blytheville community where congested traffic conditions will be improved with closure of Blytheville AFB. Part of Arkansas Highway 18 between U.S. Highway 61 in Blytheville and Interstate Highway 55 south and east of the city is presently a problem area. The Arkansas State Highway Department estimates the present vehicle per day (VPD) rate at 9,469, which is already within the 1988 highway use projection range for this section of road. The City of Blytheville has a current plan to improve the access but as yet no construction has begun. Although the current VPD loading on this area would be reduced, it is unlikely that these ongoing plans would be altered since Highway 18 is a major business route in the Blytheville area.

The second area of traffic congestion which will be improved with base closure is County Highway 151 between Gates 1 and 3 of Blytheville AFB. The Arkansas State Highway Department plans to widen approximately two miles of this road to four lanes. This access road has been certified as important to national defense. Air Force funds for 50 percent of the cost of preliminary engineering for the project have been approved, but could be withdrawn if the base closes since at least half of the traffic is base-related. Up until the time a contract is signed to begin construction, the project can be cancelled. However, if a contract has been signed before the base closes the project would be continued.

Blytheville AFB processed approximately 1,300 shipments of household goods in 1976 at an estimated cost of \$1,099,781. These shipments

were handled locally by 10 moving and storage agents representing 64 nation-wide moving companies. The base generates at least 75 percent of the business of these 10 agents; closing the base would likely force 9 of these 10 companies out of business. In addition, truck lines were used to ship \$66,812 worth of freight in 1976 and these revenues would be lost with base closure. Annual revenues of approximately \$675 would be lost to the Greyhound Bus line with the elimination of base-related commuter trips to the Memphis airport.

The closure of Blytheville AFB would reduce the population in the Blytheville/Gosnell area by 7,610 people. Both county road and city street funds returned from the state gas and registration tax are based on population. The closing of Blytheville would reduce road and street funds by approximately 36 percent.

Transportation trends in the impact area will be affected if closure of Blytheville AFB results in cancellation or delay of any planned transportation projects such as the highway improvements discussed above. There is also currently a revived effort being made in Blytheville to obtain commercial air service for passengers and freight. A study is being developed to show the economy of this commercial service. Failure of the Civil Aeronautics Board to approve such a service is virtually assured with closure of Blytheville AFB. However, approval of the request is doubtful in any event because of Blytheville's close proximity to the Memphis airport.

UTILITIES (AFERN 4.4.2)

Impacts on local water and sewer utility systems occurring with the closure of the base would result from loss of off-base households of base personnel. The most significant impact on local water and sewer utilities will occur in the City of Gosnell. The Gosnell Water Association will lose about 50 percent of their total annual revenue with the loss of 443 households of civilian and military personnel who

are currently utility customers. Total annual revenue of the Gosnell Water Association is about \$73,000. The City of Gosnell provides sewer services to these same off-base households and would lose a comparable percentage of their total annual revenue of about \$25,500. The Gosnell Water Association and the City of Gosnell presently have outstanding loans from the Farmer's Home Administration of about \$1,145,000 for construction of needed water and sewer facilities. If the base were closed there would be considerable difficulty in meeting scheduled interest and principal payments on these bonds. Impacts on utility rates to 485 remaining residential users cannot be determined.

The City of Blytheville has 6,757 residential water users and about 6,300 residential sewer customers. Based on an estimated loss of 891 households in Blytheville and 443 in the Gosnell area as a result of base closure, the City of Blytheville may lose about 10 percent of their utility revenues for water and sewer services. Loss of this revenue could hasten the need for upward rate adjustments to remaining customers.

The Arkansas-Missouri Power Company would lose approximately \$474,000 in annual revenues from loss of base-related sales, including \$264,000 in electrical utilities, \$104,00 in natural gas procurements, and \$106,000 in sales of heating and cooking fuel. The Arkansas-Missouri Power Company has already filed for a rate increase and the outcome of this request is not expected to change with closure of the base; therefore, impacts on remaining electric utility users in the community are not expected to be significant. Similarly, the cost and availability of natural gas for community users will not be affected by base closure.

The Blytheville River Rail Terminal Company has invested in excess of \$420,000 in facilities to ship fuel oil from the Mississippi River to Blytheville AFB. Closure of the base would necessitate closure of this company. In addition, terminal dock facilities would no longer be available for several auxiliary services which are now provided,

including river shipment of petroleum products to the Arkansas-Missouri Power Company, and use by the U.S. Army Corps of Engineers.

Southwestern Bell Telephone Company provides on-base residential and administrative service lines to the base and would lose an estimated \$1,017,000 in annual revenues with base closure. Base personnel residing off-base constitute an estimated additional \$720,000 in annual revenues to this utility company. Total revenue to this company for Mississippi County telephone service is approximately \$6,180,000 annually. Therefore, total revenue lost with base closure could represent a maximum of 28 percent of countywide telephone revenues. Rates to remaining users in Mississippi County would not be changed as a result of base closure, however.

All solid waste generated on-base is disposed of in a base sanitary landfill. The Arkansas Waste Disposal Company will lose approximately \$79,000 annually, or 6 to 7 percent of the company's total annual gross revenues from loss of government procurements for refuse collections if the base is closed. Additional contractual agreements for operation of the sanitary landfill amount to about \$32,000 annually. Households of personnel residing off-base generate an estimated 10.6 acre-feet of solid waste annually. Each municipality in the area has its own collection and disposal system, primarily incineration or landfill. While many landfills do not comply with EPA requirements in this area, base closure would have a negligible impact on these operations.

LAND USE (AFERN 4.4.3)

See Chapter II of this statement.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Implementation of the alternate action would reduce air operations to zero at Blytheville AFB.

COMPARISON OF MAJOR STUDY SUBMITTAL

In November, 1976, a study regarding the proposed closure of Blytheville AFB was completed by the College of Business at Arkansas State University. This study, entitled The Economic Impact of the Proposed Closure of Blytheville Air Force Base, Blytheville, Arkansas, was prepared by Dr. L. E. Talbert and Dr. John Kaminarides in association with other members of the staff. This study assessed the proposed impact of base closure on employment, population, housing, retail sales, education and other designated socioeconomic indicators.

The purpose of this section will be to compare the methodologies and results found in this special study with those developed by the consultants to the Air Force. This comparison will be limited mainly to the key socioeconomic descriptors.

Employment

In assessing the indirect employment losses which would be associated with the proposed closure of Blytheville AFB, the Air Force study team and the local consultant used a methodology which was basically similar. This methodology involved the calculation of regional employment multipliers using basic/non-basic ratios. In both instances, these basic/non-basic ratios were calculated using a form of the location quotient technique.

There were some differences, however, in the basic approach taken under this methodology. In the study prepared by Arkansas State, the Index of Local Specialization (ILS), a form of location quotient, was developed for the East Arkansas region. The basic/non-basic ratios resulting were assumed to be equivalent to those for Mississippi County and were applied to its employment profile to arrive at the indirect employment multiplier. In the Final Environmental Impact Statement (FEIS), basic/non-basic ratios were developed for Mississippi County independently.

In the locally-prepared study, basic/non-basic ratios were calculated on the basis of total employment in 1970, 1972 and 1974 and on average employment for 1970, 1972 and 1974. In the EIS, basic/non-basic ratios were calculated only for 1975 after an initial calculation for the years for which data were available yielded no significant differences in the ratios.

In attempting to refine its analysis, the Arkansas State study team surveyed the productivity of regional industries and that share of the regional industries' production which is exported. This refinement served to calibrate the location quotients calculated in determining the basic/non-basic employment ratios. The indirect total employment multiplier developed in using this method was 1.17. They, however, chose to use for the purpose of their analysis the 1.68 civilian multiplier and the .65 military multiplier developed by the Air Force in the Draft Environmental Impact Statement. In the revised calculations of the FEIS, the net civilian employment multiplier is .56 and the net military multiplier is .36. Since Arkansas State used the multipliers and manning figures from the DEIS, a comparison of resultant unemployment figures is not realistic.

Population

A major distinction between the EIS and the study performed by Dr. Talbert, Dr. Kaminarides and others is that in the local study an attempt was made to define the magnitude of indirect employment loss. According to their formulation, each indirect job loss will cause an additional 1.35 persons to leave the impact area.

In the EIS, it was not considered appropriate to estimate indirect population loss since this would require an in-depth knowledge of the psychological motivations of the impact area population which may cause persons to leave the area or remain.

Housing

The major distinction between the Arkansas State Study and the EIS lies in the focus. In the locally-prepared study, the housing market is examined mainly in relation to real estate values while the EIS focused on resultant vacancy rates. Both studies place their primary emphasis on the Blytheville-Gosnell housing market.

The local study estimated that there would be 3,449 vacancies created in the Blytheville-Gosnell housing market as a result of base closure. This compares with 1,334 units vacated by departing personnel according to the EIS. This difference is accounted for by the fact that the Arkansas State study has incorporated the indirect population and household loss into their estimate for vacancies created.

Retail Sales

According to the Arkansas State study, the impact area would lose approximately \$60.4 million in total retail sales due to income loss if the base closure were implemented. This compares with a retail sales loss of approximately \$10.5 million estimated in the FEIS.

The major difference in these amounts is accounted for by the fact that the analysis performed by the local study team does not discount on-base sales and it includes losses from other direct losses of income, (i.e., procurements), and the multiplier effect.

C. Wurtsmith Air Force Base Area

NATURAL ENVIRONMENT (AFERN 3.0)

EARTH (AFERN 3.1)

This alternative action should not generate significant adverse effects, nor alter the fundamental physiographic, geological, and soil characteristics and properties of the area. The soil is sufficiently fertile to support adequate vegetal cover, and has been managed to maintain such cover. Allowing it to revert to a natural state may actually enhance erosion protection. Surface and sub-surface conditions should remain unchanged since construction projects are not involved. Solid waste and refuse generation should decrease. The overall effect should be minimal, and the useful life of sanitary landfills in the area should be extended.

WATER (AFERN 3.2)

A decrease in demand on water and sewage facilities on-base and in the civilian community would occur. On-base waste water discharges would be eliminated. While the effect on effluent receiving waters should be favorable, there are no existing discharge problems.

AIR (AFERN 3.3)

Air quality in the environs of Wurtsmith AFB probably will be improved as a result of the alternative action. A decrease in air pollutant emissions on base and in the civilian community would be anticipated. The decrease on base would result directly from the elimination of aircraft operational activity and stationary emissions.

BIOTIC ENVIRONMENT (AFERN 3.4)

The proposed action may have an initial slight negative impact on the biota but recovery should occur within a few months. A long-term beneficial impact on the biotic environment should result. Presently, there are no major game or wildlife programs in being at Wurtsmith. Although there are approximately 2,400 acres of woodland, this acreage, compared with the surrounding area, is not unique. No threatened or endangered species of plants or animals are known to occur on base property with the exceptions of occasional transient animal activity.

HUMAN ENVIRONMENT (AFERN 4.0)

POPULATION (AFERN 4.1.1)

As an alternative to the closure of Kincheloe Air Force Base, Wurtsmith Air Force Base would be inactivated. This would result in the direct loss of 3,103 military and 736 civilian personnel. A summary of this proposed personnel reductions at Wurtsmith is presented in the following table.

Table III-22. SUMMARY OF PROPOSED PERSONNEL
REDUCTIONS AT WURTSMITH AFB, MICHIGAN

	<u>Military</u>			<u>Civilian</u>			<u>Total Personnel</u>
	<u>Officers</u>	<u>Airmen</u>	<u>Total</u>	<u>DAF</u>	<u>NAF</u>	<u>Total</u>	
Assigned As of 3-31-76	462	2,641	3,103	554	182	736	3,839
Number to be Reduced	462	2,641	3,103	554	182	736	3,839
Residual After Action	0	0	0	0	0	0	0

Source: Description of Proposed Action and Alternatives,
Headquarters, Strategic Air Command, Directorate
of Plans, Policy and Programs

If the proposed alternative action involving closure of Wurtsmith is implemented, population losses throughout the Primary Impact Area and adjacent portions of Alcona County can be anticipated. As a direct

result of base closure, somewhat over 3,000 military personnel would be transferred to other installations and depart from Iosco County. It is more difficult to predict the behavior of base civilian employees terminated by the closure action.

Some Civil Service employees nearing retirement age may take early retirement and remain in the area. Other employees may be secondary wage earners whose spouses retain their jobs in the civilian sector; some such households may remain in the area. Some civilian employees with strong roots and family ties in the area may remain when their jobs are terminated and collect unemployment compensation until new employment opportunities are found or unemployment benefits run out. Still others may decide to move and seek employment in other Michigan counties or be placed by the Civil Service in positions elsewhere in the country.

As the economic impact of the base closure reverberates throughout the local economy, indirect population losses will undoubtedly occur. As noted in the following section on employment measures, approximately 1,500 jobs in the civilian sector of the economy will be lost as an indirect result of the base closure. Employees laid off as an indirect result of base closure will likewise face the decision whether to remain in the community collecting unemployment benefits and seeking alternative employment opportunities or move with their families to seek jobs elsewhere. With no previously documented experience upon which to base estimates, indirect population losses can certainly be anticipated but the quantitative magnitudes cannot be predicted with any reasonable degree of certainty. Therefore, for purposes of this analysis, only direct population losses have been computed.

Based on previous experience at other Air Force Base installations, the following assumptions have been made regarding direct population losses:

- o All military personnel and their dependents would leave the Primary Impact Area;

- o Sixty-two percent of Appropriated Fund personnel and their dependents would leave the area and relocate in other jurisdictions outside the Primary Impact Area;
- o The residual 38 percent of the Appropriated Fund personnel and all Non-appropriated Fund employees would remain in the community along with their dependents.

In applying these assumptions, Iosco County would lose nearly 30 percent of its 1976 baseline population as a direct result of Wurtsmith closure. Estimated direct population losses for all the impacted areas are presented in the table on the following page.

The population loss would be most severe in the Oscoda/Au Sable townships area. The departure of approximately 3,200 base personnel and their dependents would result in a total population loss of approximately 50 percent. The majority of these, however, are those currently living on the Air Force Base itself and the off-base population loss within Oscoda and Au Sable Townships would be a somewhat lesser but still significant 25.5 percent. In Tawas, East Tawas and the balance of Iosco County, estimated population losses would not exceed four percent of their current total.

Among Alcona County jurisdictions, Greenbush Township would suffer the most severe population loss. The nearly 80 civilian and military households departing the area along with their dependents account for 21 percent of the township's total population. Three other areas within Alcona County would lose population on the order of four to nine percent. With base-related population concentrated in only a few of Alcona's civil divisions, the county as a whole is expected to lose approximately four percent of its total population as a direct result of base closure.

Even in measuring only the direct population losses associated with closure of Wurtsmith Air Force Base, the action would severely impact Iosco County and adjacent portions of neighboring Alcona County. The impact

on population would be compounded significantly by indirect population losses but these cannot be reliably estimated or quantified.

Table III-23. ESTIMATED DIRECT POPULATION LOSS, WURTSMITH
AIR FORCE BASE IMPACT AREAS

	<u>1976 Baseline Population</u>	<u>Estimated Direct Population Loss</u>	
		<u>Number</u>	<u>Percent</u>
<u>Primary Impact Area:</u>			
<u>Iosco County</u>			
Oscoda/Au Sable Twps.	16,750	8,490	50.7%
Wurtsmith AFB	(5,660)	(5,660)	(100.0)
Balance of Twps.	(11,090)	(2,830)	(25.5)
East Tawas City	2,850	90	3.2
Tawas City	<u>2,050</u>	<u>80</u>	3.9
Subtotal	21,650	8,660	40.0
Balance of Iosco County	9,150	20	0.2
<u>TOTAL PRIMARY IMPACT AREA</u>	<u>30,800</u>	<u>8,680</u>	<u>28.2%</u>
<u>Other Impact Areas:</u>			
<u>Alcona County</u>			
Greenbush Twp.	1,000	210	21.0%
Harrisville/ Harrisville Twp	1,900	80	4.2
Lincoln Village	500	40	8.0
Mikado Twp.	900	80	8.9
Balance of County	5,420	10	0.2
<u>TOTAL OTHER IMPACT AREAS</u>	<u>9,720</u>	<u>420</u>	<u>4.3%</u>

Source: Hammer, Siler, George Associates

ECONOMIC CHARACTERISTICS (AFERN 4.2)

EMPLOYMENT (AFERN 4.2.2)

The proposed alternative action at Wurtsmith Air Force Base would result in both direct and indirect employment losses. Transferred or terminated military and civilian personnel assigned to the base represent the direct employment losses. The elimination of these jobs and the termination of other base influences such as procurements and other purchases in the local economy would reverberate and have secondary job loss effects. These indirect job losses would occur in several ways.

Both civilian and military personnel at the base eat in local restaurants, buy clothing and other goods from local retail establishments and purchase at least some grocery items from local supermarkets. With the departure of base personnel and their dependents, retail sales would diminish and local retailers may be forced to reduce employment levels.

Similarly, the termination of base procurement and construction awards to local firms may also affect employment levels at these establishments. Utility companies, public school systems, local governments and other employers in the area may likewise be forced to lay off employees because of diminished activity resulting from base closure. Some small businesses and others only marginally profitable may be forced to liquidate and go out of business entirely. These impacts will continue to ripple throughout the local economy in a variety of subtle ways and have a cumulative impact on total employment in the civilian sector.

In order to measure the magnitude of these indirect losses, employment multipliers were developed for the Wurtsmith AFB Primary Impact Area.

Two separate multipliers have been derived: a civilian multiplier and a military multiplier. The civilian multiplier represents the mathematical relationship between civilian personnel working on the base and total employment in the civilian sector of the local economy as a whole. Reflecting their incomes and expenditure patterns within the local civilian sector, the multiplier derived for the Wurtsmith Primary Impact Area suggests that for every one civilian employee at the base another .90 jobs in the civilian sector are attributable to civilian employment on the base.

Because of on-base housing, BX and commissary privileges, the average military man spends less in the civilian sector of the economy. The military multiplier developed for the Wurtsmith Primary Impact Area indicates that for every uniformed military person assigned to the base, .28 jobs in the civilian sector are attributable to military personnel levels at Wurtsmith.

Applying these multipliers to the direct reduction in Wurtsmith's civilian and military personnel levels expresses the indirect job loss in the civilian sector of the economy that can be expected following base closure. As an indirect result of the 3,653 civilian and military personnel transferred or terminated, then, the Iosco County economy will lose an additional 1,364 jobs. A summary of these direct and indirect employment losses is presented in the table on the following page.

The direct loss in 3,103 military positions would result in a net loss of 869 additional jobs in the civilian sector while the termination of 550 civilian employees living in Iosco Cty would result in a net loss of 495 additional jobs in the civilian sector. When both direct and indirect employment losses are taken into account, the 5,017 jobs lost as a result of the alternative base closure action represent 47.7 percent of all jobs in Iosco County as of March 31, 1976. In losing nearly half of its baseline military and civilian employment, the Iosco County Primary Impact Area would suffer a tragic employment loss.

Table III-24. SUMMARY OF DIRECT AND INDIRECT EMPLOYMENT LOSSES
IN THE WURTSMITH AFB PRIMARY IMPACT AREA

<u>Direct Employment Loss</u>	<u>Number of Jobs</u>
Military	3,103
Civilian	<u>550</u>
Subtotal	(3,653)
<u>Indirect Employment Loss</u>	
Military (Net Multiplier of .28)	869
Civilian (Net Multiplier of .90)	<u>495</u>
Subtotal	(1,364)
<u>Total Employment Loss</u>	5,017
Percent of Total Baseline Employment ^{1/}	<u>47.7%</u>

1/ Includes both civilian and military employment.

Source: Description of Proposed Action and Alternatives, Headquarters, Strategic Air Command, Directorate of Plans, Policy and Programs; and Hammer, Siler, George Associates.

Unemployment

The civilian labor force in the Iosco County Primary Impact Area would be reduced from 8,425 to 8,162 persons. This is based on the assumption that 62 percent of the terminated Appropriated Fund civilian personnel will relocate out of the area. Even assuming a somewhat smaller resident civilian labor force, the 2,651 direct and indirect civilian job losses associated with the closure of Wurtsmith Air Force Base would increase the existing unemployment rate to almost 33 percent in the County. The resultant unemployed rate for the Wurtsmith AFB Primary Impact Area is presented in the table below.

Table III- 25. CIVILIAN LABOR FORCE AND UNEMPLOYMENT
IN THE WURTSMITH AFB PRIMARY IMPACT AREA

March 31, 1976 Baseline

Civilian Labor Force	8,425
Total Unemployed	1,000
Unemployment Rate (1975 Annual Avg.)	11.9%

Post-Action

Civilian Labor Force	8,162
Total Unemployed	2,651
Unemployment Rate	32.5%

Source: Michigan Employment Security Commission; and
Hammer, Siler, George Associates

The Primary Impact Area would suffer a very serious blow following Wurtsmith closure; almost 33 percent of its civilian labor force would be unemployed. Modest growth in the tourism, recreation, second home and retirement aspects of the economy could absorb only a fraction of those left unemployed following a Wurtsmith closure. The Iosco/Au Sable townships area will experience the greatest job losses. Another heavily impacted area will be Greenbush Township, located in nearby Alcona County.

Total Personal Income

Total personal income in the Iosco County Primary Impact Area totalled roughly \$139.7 million during calendar year 1975. As illustrated in the table below, base payrolls represented 26.1 percent of total personal income in the area.

Table III-26. BASE PAYROLL CONTRIBUTION TO TOTAL PERSONAL INCOME IN THE WURTSMITH AFB PRIMARY IMPACT AREA

1975 Total Personal Income	\$139,700,000
Annual Base Payrolls	\$ 36,500,000
Percent of TPI	26.1%

Note: Values expressed in 1975 constant dollars

Source: November 30, 1976, Leave and Earnings Statement File, U.S. Air Force Accounting and Finance Center; Non-appropriated Fund Financial Analysis Office, Wurtsmith Air Force Base; and Hammer, Siler, George Associates.

If closure of Wurtsmith AFB were implemented and its payroll contribution to the community terminated, the economy of Iosco County would experience not only a direct loss of 26.1 percent of its total personal income but an additional decline in income due to indirect job losses. Should the proposed closure of Wurtsmith AFB be implemented, the Primary Impact Area economy will experience a loss of \$10.4 million in personal income as a result of indirect job losses. This was estimated by applying a median earnings per worker figure of \$7,641 for the impact area to the 1,364 indirect job losses.

Retail Sales

To determine current spending by base personnel in civilian sector retail establishments and to estimate the direct impacts of base closure on total retail sales, the total annual retail expenditure of base personnel was derived by applying a retail sales expenditure factor to total base

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payroll. Actual sales at the Wurtsmith AFB commissary, exchange and clubs were subtracted from the total expenditure potential to indicate the amount spent in civilian sector establishments. This methodology overstates the contribution of base personnel to civilian retail sales in the area somewhat since some purchases were undoubtedly made in other areas. As a "worst case" methodology, however, it expresses the maximum possible direct impact of base personnel on local retail sales and the loss that would accompany base closure.

Table III-27. ESTIMATED DIRECT IMPACT OF WURTSMITH AFB PERSONNEL ON RETAIL SALES IN THE PRIMARY IMPACT AREA

Total 1975 Primary Impact Area	
Retail Sales	\$71,897,000
Maximum Attributable to	
Base Personnel	\$8,419,235
Percent of Total	11.7%

Source: Bureau of Labor Statistics, U.S. Department of Labor; Survey of Buying Power, 1976; Tab A-1 (revised) WAFB; and Hammer, Siler, George Associates

Base personnel accounted for a maximum of \$8.4 million in retail sales at Primary Impact Area establishments, 11.7 percent of total reported sales. If retail sales were to decline 11.7 percent following base closure, it is anticipated that a number of employees would be laid off and that some small businesses, especially those catering to base personnel, would go out of business. The loss of these jobs is accounted for in the multiplier used to express total indirect job losses.

PUBLIC FINANCE (AFERN 4.2.3)

If Wurtsmith AFB were closed, a variety of realignments in public revenues and expenditures would ensue. These impacts would be evident at both the

state and local levels. Because of the formulas often used in the assessment of state and local revenues as well as the variety of complicated formulas used in the apportionment of federal and state funds among constituent jurisdictions, few of the revenue and expenditure impacts can be evaluated in detail. Only one of them can be quantified with any degree of confidence: as reported under AFERN 4.3.5, public school revenue losses from federal and state sources have been estimated.

Apart from these fiscal impacts on local school system revenues, other major sources of state and local revenues will be affected even if the dollar values cannot be quantified with certainty: income and sales taxes, federal revenue sharing and local ad valorem real property taxes. At the state level, the two major sources of revenue that would be affected are the personal income tax and the sales tax.

Income and Sales Taxes

Since many military personnel assume one permanent place of residence for tax purposes throughout their careers, transfers from Wurtsmith AFB to other bases in the country will not have a major impact on state income tax revenues. The income tax loss from terminated civilian employees and indirect job losses may be more severe even if their numbers are smaller. These impacts cannot, however, be quantified.

No local income taxes are collected by Michigan counties. A portion of state income tax collections are returned to counties, but these are based on the county's share of the state's 1970 population. No impact on income tax distributions by the State of Michigan to the Iosco County Primary Impact Area would be perceived until 1980, the year a new population base would be established.

State sales tax losses attributable to direct impacts of base closure can at least be approximated. Based on the estimated \$8.4 million spent by base personnel at retail establishments in the civilian sector,

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DEPARTMENT OF THE AIR FORCE WASHINGTON D C
PROPOSED CLOSURE OF KINCHELOE AIR FORCE BASE, MICHIGAN. (U)
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This is a microcopy resolution test chart, specifically NBS 1010-A. It features a grid of patterns, each consisting of five horizontal and five vertical lines of a specific thickness and spacing. Each pattern is labeled with a number indicating its resolution. The numbers are arranged in a grid-like fashion, with some numbers appearing in multiple locations. The numbers include 1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0, 9.0, 10, 11, 12.5, 14, 16, 18, 20, 22.5, 25, 28, 32, 36, 40, 45, 50, 56, 63, 71, 80, 90, 100, 112, 125, 140, 160, 180, 200, 224, 250, 280, 315, 360, 400, 450, 500, 560, 630, 710, 800, 900, 1000, 1120, 1250, 1400, 1600, 1800, 2000, 2240, 2500, 2800, 3150, 3600, 4000, 4500, 5000, 5600, 6300, 7100, 8000, 9000, 10000, 11200, 12500, 14000, 16000, 18000, 20000, 22400, 25000, 28000, 31500, 36000, 40000, 45000, 50000, 56000, 63000, 71000, 80000, 90000, 100000, 112000, 125000, 140000, 160000, 180000, 200000, 224000, 250000, 280000, 315000, 360000, 400000, 450000, 500000, 560000, 630000, 710000, 800000, 900000, 1000000, 1120000, 1250000, 1400000, 1600000, 1800000, 2000000, 2240000, 2500000, 2800000, 3150000, 3600000, 4000000, 4500000, 5000000, 5600000, 6300000, 7100000, 8000000, 9000000, 10000000, 11200000, 12500000, 14000000, 16000000, 18000000, 20000000, 22400000, 25000000, 28000000, 31500000, 36000000, 40000000, 45000000, 50000000, 56000000, 63000000, 71000000, 80000000, 90000000, 100000000, 112000000, 125000000, 140000000, 160000000, 180000000, 200000000, 224000000, 250000000, 280000000, 315000000, 360000000, 400000000, 450000000, 500000000, 560000000, 630000000, 710000000, 800000000, 900000000, 1000000000, 1120000000, 1250000000, 1400000000, 1600000000, 1800000000, 2000000000, 2240000000, 2500000000, 2800000000, 3150000000, 3600000000, 4000000000, 4500000000, 5000000000, 5600000000, 6300000000, 7100000000, 8000000000, 9000000000, 10000000000, 11200000000, 12500000000, 14000000000, 16000000000, 18000000000, 20000000000, 22400000000, 25000000000, 28000000000, 31500000000, 36000000000, 40000000000, 45000000000, 50000000000, 56000000000, 63000000000, 71000000000, 80000000000, 90000000000, 100000000000, 112000000000, 125000000000, 140000000000, 160000000000, 180000000000, 200000000000, 224000000000, 250000000000, 280000000000, 315000000000, 360000000000, 400000000000, 450000000000, 500000000000, 560000000000, 630000000000, 710000000000, 800000000000, 900000000000, 1000000000000, 1120000000000, 1250000000000, 1400000000000, 1600000000000, 1800000000000, 2000000000000, 2240000000000, 2500000000000, 2800000000000, 3150000000000, 3600000000000, 4000000000000, 4500000000000, 5000000000000, 5600000000000, 6300000000000, 7100000000000, 8000000000000, 9000000000000, 10000000000000, 11200000000000, 12500000000000, 14000000000000, 16000000000000, 18000000000000, 20000000000000, 22400000000000, 25000000000000, 28000000000000, 31500000000000, 36000000000000, 40000000000000, 45000000000000, 50000000000000, 56000000000000, 63000000000000, 71000000000000, 80000000000000, 90000000000000, 100000000000000, 112000000000000, 125000000000000, 140000000000000, 160000000000000, 180000000000000, 200000000000000, 224000000000000, 250000000000000, 280000000000000, 315000000000000, 360000000000000, 400000000000000, 450000000000000, 500000000000000, 560000000000000, 630000000000000, 710000000000000, 800000000000000, 900000000000000, 1000000000000000, 1120000000000000, 1250000000000000, 1400000000000000, 1600000000000000, 1800000000000000, 2000000000000000, 2240000000000000, 2500000000000000, 2800000000000000, 3150000000000000, 3600000000000000, 4000000000000000, 4500000000000000, 5000000000000000, 5600000000000000, 6300000000000000, 7100000000000000, 8000000000000000, 9000000000000000, 10000000000000000, 11200000000000000, 12500000000000000, 14000000000000000, 16000000000000000, 18000000000000000, 20000000000000000, 22400000000000000, 25000000000000000, 28000000000000000, 31500000000000000, 36000000000000000, 40000000000000000, 45000000000000000, 50000000000000000, 56000000000000000, 63000000000000000, 71000000000000000, 80000000000000000, 90000000000000000, 100000000000000000, 112000000000000000, 125000000000000000, 140000000000000000, 160000000000000000, 180000000000000000, 200000000000000000, 224000000000000000, 250000000000000000, 280000000000000000, 3150

the state derives approximately \$337,000 annually in sales tax revenues from base personnel at its four percent taxing rate. Even as a "worst case" example, this loss in sales tax revenues represents less than one-tenth of one percent of total state sales tax collections of \$1.1 billion in 1975. No local sales taxes are collected by Iosco County. Therefore, no impact on county tax revenues is expected due to reductions in retail purchases by Wurtsmith personnel.

Unemployment Compensation

Base closure would create both direct and indirect job losses. In most cases, unemployed personnel would be eligible for unemployment compensation benefits. An unemployment compensation benefit program is actually an insurance program which by design is intended to be wholly supported by the mandated contributions of the private and public sector employers who participate in the state-administered program. Although unemployment benefits are paid through a state program, the funds utilized originated with the employers whose contributions are "banked" until needed. Any overdraw against contributions banked must be repaid to the state in the future.

At this point in time the number of people finding new jobs in the area, increasing their average daily commuting distances to take jobs outside the area or relocating to other areas cannot be accurately projected. In this analysis, then, the total unemployment benefit program impact -- or cost -- was not developed. The maximum cost for unemployment benefits to federal civilian employees whose job losses would be a direct result of a base closure would be: (65 weeks) x (\$136/week) x (550 civilian jobs), or 4.9 million.

Revenues Sources

At the local level, the closure action would have a more pronounced impact on fiscal affairs. Federal revenue sharing and ad valorem taxes are among the revenue sources most difficult to evaluate.

Title I of the State and Local Fiscal Assistance Act of 1972 (Revenue Sharing) provides for the distribution of Federal funds to units of local government. The amounts to be distributed to each unit of government are determined by applying a set of formulas to descriptive data pertaining to each unit. These formulas utilize population, per capita income, adjusted taxes and inter-governmental transfers as their basic data elements and are used to determine each government's share of the total amount. The resulting computation distributes available funds among all eligible units of local government on a national basis. While the closure action will undoubtedly alter many of the measures drawn upon in the allocation formula, the Office of Federal Revenue Sharing in the U.S. Treasury Department has stated that no reliable estimates of the impacts on a local government can be made. In part, this is due to the nature of the allocation process: the effect of changes in one local area is dependent upon comparisons with all other eligible units of local government in the U.S. Even estimated direct changes in population are not a reliable indicator since this factor in the formula is important only within certain minimum and maximum thresholds concerning per capita income.

In sum, estimated changes in revenue sharing based on per capita amounts do not reflect the characteristics of the distribution formula and no other reliable method of gauging the impacts is available. While federal revenue sharing funds may diminish, it is impossible in this analysis to predict the amounts or order of magnitude.

Real estate property taxes are the single largest source of revenue for most units of local government. While real estate values in the market place will undoubtedly diminish, it is not certain that property tax revenues will necessarily decrease. This depends upon local government operating cost and budget requirements, changes in assessed values or the effective tax mill rate.

To some extent, the departure of base personnel and their dependents as well as other indirect population losses may diminish the demand for certain types of public services. However, many operating costs in local government are "fixed" and cannot be readily adjusted to reflect changes in the population level. In continuing to meet operating costs, the same or only slightly diminished amounts of property tax revenues may be required by the local governments most severely impacted by base closure.

In the face of a depressed real estate market and diminished values, local governments have several options in closing the gap between revenue requirements and the value of their real estate tax bases: institute new types of taxes, alter the assessment/market value ratio used in levying real estate taxes or raise the real estate tax rate itself. Whatever options they pursue, local government decisions will undoubtedly increase the tax burden on remaining households in one way or another.

Capital Improvements Programming

A closure of Wurtsmith AFB could affect the status of planned capital improvements projects in several ways. It could be determined that some projects are no longer necessary if the population they were to serve is substantially reduced. The cost of others may not be supportable as the county's tax base and consequent bonding capacities are reduced over the next few years. Commitments which have already been made to projects which are no longer financially feasible or politically desirable may cause problems in local government financing and channel available resources away from basic services provision to debt service. Some projects which may be necessary to the area will no longer be financially feasible and will have to be postponed.

BASE PROCUREMENT (AFERN 4.2.4)

Were the base to close, the Iosco County Primary Impact Area would lose approximately \$6.2 million annually in non-construction procurements and its contract construction firms would lose over half a million dollars on an average annual basis. In combining both non-construction procurement and average annual construction awards, the Iosco County Primary Impact Area would lose approximately \$6.8 million annually. These are summarized in the table below.

Table III- 28. ESTIMATED ANNUAL LOSS IN CONSTRUCTION AND PROCUREMENT AWARDS, WURTSMITH AFB PRIMARY IMPACT AREA

<u>Procurement Type</u>	<u>Amount</u> <u>(\$000)</u>
Non-Construction Procurement	\$6,200.5
Average Annual Construction Awards	<u>630.3</u>
Total	\$6,830.8

Source: Hammer, Siler, George Associates

HOUSING (AFERN 4.2.5)

Closure of Wurtsmith Air Force Base would have both short-term and long-term effects on the previously healthy housing market in the Primary Impact Area. Even the announcement that Wurtsmith may be closed has had an immediate impact. In the atmosphere of uncertainty, developers have canceled planned projects, financial institutions are reluctant to initiate new mortgage commitments and construction loans while consumers themselves are hesitant to make the financial commitments involved in purchasing a new home. In this current state of uncertainty, the housing market has come to a virtual standstill and the inventory of unsold units on the market continues to mount.

If the Air Force Base is closed, the impact on the community housing market would be severe. Departing military and civilian personnel currently living in off-base housing would place their vacated units on the market and increase the vacancy rates substantially. Those losing their jobs as an indirect result of base closure may be confronted with several problems. Homeowners may wish to relocate to other areas but have difficulty selling their homes. If they remain in the area and collect unemployment benefits, terminated employees may have difficulty meeting rent and mortgage payments. As a consequence, mortgage delinquency rates may increase and unless the homeowner has substantial equity in the unit, mortgage default rates may likewise increase somewhat.

As a consequence of both direct and indirect impacts, the housing market in the Primary Impact Area will be depressed. Even those who retain their jobs and could afford to buy new housing may be discouraged from doing so by the uncertainty concerning the future of the area and the general "depression" mentality. If homes are sold at all, prices will undoubtedly be depressed but it is impossible to predict the relative decline in values with any degree of certainty. In the short run, certainly, supply would far exceed the demand. To some extent, continued growth of the vacation/second home and retirement market may absorb some of the vacated owner-occupied units but it will still take quite some time for the overall market to return to a state of equilibrium.

In measuring the quantifiable effects of base closure on the housing market, only the increase in vacancies attributable to direct civilian and military household losses can be computed. These are presented in the table on the following page.

Table III-29. ESTIMATED DIRECT IMPACT OF WURTSMITH
AFB CLOSURE ON HOUSING MARKET
VACANCIES IN THE PRIMARY IMPACT AREA

	<u>East Tawas City</u>	<u>Tawas City</u>	<u>Balance of Iosco County</u>	<u>Total Primary Impact Area</u>
1976 Baseline Vacant Units for Sale or Rent	37	14	341	392
Units Vacated by Departing Personnel	34	28	1,019	1,081
Total Post-Action Vacant Units for Sale or Rent	71	42	1,360	1,473
Post-Action Market Vacancy Rate	6.9%	6.4%	17.9%	15.9%

As illustrated in the table, the number of vacant units in both Tawas and East Tawas would more than double as a direct result of base closure. The resulting market vacancy rate, however, would increase but not to such an extent that the market would be severely jeopardized. In the remainder of Iosco County, particularly the Oscoda/Au Sable area, the impacts on market vacancy levels would be severe. The number of vacant units intended for year-round occupancy would increase by more than 1,000. As a consequence, the market vacancy rate would increase from approximately five percent to nearly 20 percent.

While these increases in the market vacancy rate are dramatic, they only represent those attributable to direct household losses and do not begin to account for other indirect job losses and departures from the region. Such secondary impacts will certainly compound the market vacancy rates and add to the severity of depressed housing market conditions.

INSTITUTIONAL CHARACTERISTICS (AFERN 4.3)

GOVERNMENT (AFERN 4.3.1)

Present forms of government and jurisdictional boundaries of Iosco County, the county townships, and the cities of Tawas and East Tawas are not expected to change as a result of base closure. However, because impacts on public finance, community services and facilities, and public schools will be significant, new institutional arrangements may emerge for economic development strategies.

Additional services will be needed to help civilian personnel who will be unemployed if the base is closed. At the same time, financial and labor resources for local government operations may be strained. As an example of impacts on available labor resources, a number of base employees as well as their dependents hold jobs in the communities surrounding the base. Although government employment is not significant as a second job for base employees, it accounts for a large percentage (42 percent) of employment for their spouses.

It is anticipated that the East Central Michigan Planning and Development Regional Commission would emerge as a key agency in efforts to unite the area in economic recovery strategies if the base were closed. Future planning programs of this agency will be affected by changes in area population and the socioeconomic stresses accompanying base closure, as planning for Iosco County has been largely influenced in the past by the presence of Wurtsmith AFB and the needs of its personnel and their dependents.

EDUCATION (AFERN 4.3.3)

If the proposed closure action at Wurtsmith AFB were implemented, two of three school districts in the area would be impacted. The two districts are the Oscoda Area Schools, which includes the base itself, and

the Tawas Area Schools. These two districts enroll 93 percent of the students from Wurtsmith AFB households. Base closure would result in enrollment losses, funding losses, employment losses, and under-utilization of physical facilities.

Oscoda area schools contain almost 96 percent of the AFB dependents. As shown in Table III-29, it is estimated that Oscoda would lose all 1,256 of the Type A students and 514 Type B students whose parents are Department of the Air Force Appropriated Fund employees expected to transfer to federal jobs outside the area.

Table III-30. IMPACT ON PUBLIC SCHOOL SYSTEM ENROLLMENT,
WURTSMITH AFB

<u>School District</u>	<u>1975-76</u>	<u>Estimated Loss</u>			<u>Percent of</u>
	<u>Total</u>	<u>Type A</u>	<u>Type B</u>	<u>Total</u>	<u>Total</u>
	<u>Membership</u>				<u>Membership</u>
Oscoda Area Schools	3,954	1,256	514	1,770	44.8%
Tawas Area Schools	1,972	0	40	40	2.0%
Total	5,926	1,256	554	1,810	30.6%

Source: Superintendent, Oscoda Area Schools; Office of Education, U.S. Department of Health, Education, and Welfare; and Hammer, Siler, George Associates.

The Oscoda school district would lose a total of 1,770 students or almost 45 percent of its enrollment. Tawas Area Schools are estimated to lose 40 students, 2.0 percent of its enrollment. The remaining Wurtsmith AFB dependents are distributed in small communities elsewhere in Iosco County and in Alcona County.

Two funding sources for local public schools would be directly affected by base closure: Public Law (PL) 81-874 funds to areas impacted by federal facilities and state supplementary aid.

PL 81-874 funds from the federal government are based on the Average Daily Attendance (ADA) of dependents. The Oscoda Area School District received \$902,730 in PL 874 funds and Tawas schools received \$13,060. Section 3(e) of the law provides for 90 percent funding of school districts in which there has been a decrease in federal activities in which total ADA was under 90 percent of the previous year's ADA and in which the ADA of federal dependents equalled at least 10 children and 10 percent of the total enrollment.

Under these criteria, the PL 874 payments to the Tawas Area School District would be discontinued, resulting in an estimated revenue loss of \$13,060. Only the Oscoda Area School District would be eligible for continued federal aid at a reduced rate. PL 874 impact aid funds would be continued at 90 percent of each previous fiscal year until 1978, when the current law expires. If the law is extended, aid would continue for the three years following implementation of the proposed action. When federal impact aid is discontinued, the Oscoda Area School District will experience a revenue loss of \$902,730.

Additional revenue losses would occur as state-aid would also be reduced. It is estimated that Oscoda would lose \$1,416,765 in state aid and would lose total state aid membership eligibility. Losses from PL 874 sources and state aid would total \$2.3 million in Oscoda and at least \$13,060 in Tawas. These are summarized in the table on the following page.

Table III-31. ESTIMATED FUNDING AND EMPLOYMENT LOSSES TO
PUBLIC SCHOOLS, WURTSMITH AFB PRIMARY IMPACT AREA

<u>School District</u>	<u>Estimated PL-874 Funds Loss</u>	<u>Estimated State Aid Loss</u>	<u>Total Estimated Fund Loss</u>	<u>Estimated Teachers/Support Employee Loss</u>
Oscoda Area Schools	\$902,730	\$1,416,765	\$2,319,495	87/58
Tawas Area Schools	<u>13,060</u>	<u>N/A</u>	<u>13,060</u>	<u>4/2</u>
Total	\$915,790	\$1,416,765	\$2,332,555	91/60

Note: N.A. means not available.

Source: Office of Education, U.S. Department of Health,
Education, and Welfare; Superintendent of Oscoda
Area Schools; and Hammer, Siler, George Associates.

Insofar as a school district's operating expenses are unlikely to be reduced proportionately to enrollment losses, it is likely that the Oscoda school district may be required to request increased tax mill rates as a compensatory measure. The superintendent has estimated that the increase could be as high as 10.5 mills. If enrollments in Oscoda schools were to decline by about 45 percent, the superintendent estimates that they would close four elementary schools.

As a result of the projected enrollment decrease, the teaching and support staff of the school district would be reduced. The superintendent of the Oscoda area school district anticipates significant employment reductions and estimates that 145 teachers and support personnel would become unemployed. According to Michigan statute, the school district would be responsible for all of the unemployment insurance costs, which could be as high as \$362,000. In the Tawas school system, a total of six people would probably become unemployed.

In terms of higher education impacts, the 188 non-base civilians enrolled in Alpena Community College (ACC) classes on the base would probably have to commute to ACC facilities in Alpena.

MEDICAL (AFERN 4.3.4)

At the present time the Wurtsmith AFB hospital serves an estimated 700 retirees and their dependents. If the base hospital is closed these retirees and their dependents would have to utilize civilian facilities for medical care or travel to the military facility at Kincheloe AFB. Both acute and extended care facilities are located in Tawas City. Services available include general medicine, general surgery, obstetrics, coronary care, intensive care and nursing care. More comprehensive medical facilities in Bay City, Saginaw, Flint or Detroit are available for treatment or specialty services not offered in Tawas City. These medical facilities are considered adequate for the resident population and the increase in potential patient workload should not impact heavily on the facilities.

COMMUNITY SERVICES AND FACILITIES (AFERN 4.3.5)

The benefits of mutual aid agreements between the base and local fire departments would be lost to the local community if the proposed action were implemented. In addition, base personnel currently participating in local volunteer fire departments would have to be replaced.

Base personnel support many of the local cultural programs both by active participation as performers and by their attendance at local cultural events. If the base should close, some of these programs may not have enough support to continue. The list of churches, clubs, civic and charitable organizations in the local area is extensive and typical of most communities of its size. All of these organizations have members who are stationed at the base and to a greater or lesser extent all will suffer some loss of membership as a result of the base closing.

Iosco County is part of the Huron National Forest and has no shortage of outdoor recreational facilities. Only the baseball diamonds now used by the local little league may have to be replaced in the local community if the base is closed. Base indoor recreational facilities are not open to the general public so their closing would not create a shortage.

As a direct result of base closure, local financial institutions would lose the demand accounts and savings deposits of Air Force Base personnel leaving the area. In addition, indirect job losses and the depressed state of the local economy may affect these institutions in other ways. Indirect job losses and reductions in total personal income will further impact deposit levels at these institutions. Financially troubled households may encounter difficulties in meeting the payments on personal, home improvement and mortgage loans made by these institutions. Delinquency and default rates may increase accordingly.

Military Retirees

If Wurtsmith is closed, the approximately 700 retirees residing in the area will be forced to find other military installations where they can take full advantage of their retirement benefits. Because of its relatively isolated location, Wurtsmith is approximately 175 miles from any other major military facility which can provide these services. Medical services could be obtained in the area at civilian hospitals utilizing the CHAMPUS program, however, use of alternative commissary, exchange and other base services would require a long commute.

ACTIVITY SYSTEMS AND PLANS (AFERN 4.4)

TRANSPORTATION (AFERN 4.4.1)

The two airline companies serving the area, United and North Central, will experience losses in revenue if Wurtsmith AFB closed. Losses to United Airlines for the transport of personnel and air freight shipped from the base would amount to \$47,000 annually based on recent experience. North Central airlines would lose approximately \$7,000 annually for similar services. The value of freight shipments to the base from other points cannot be estimated.

If the 18-month agreement between Seaco Airlines and the base is not terminated before the proposed closure, Seaco will experience a loss of \$17,800 in revenue. This loss will be shared by Welch Airlines which maintains the planes and provides the pilots.

The Detroit and Mackinac Railway Company will lose the revenues from the 2,500 tanks cars of jet fuel it delivers to the base annually if the base closes. In addition to the railway freight service, the Detroit and Mackinac Railway Company owns several companies which would suffer revenue losses if Wurtsmith AFB were closed. Total revenue losses to the Detroit and Mackinac Railway Company were estimated to equal \$625,000.

Base closure would significantly reduce highway traffic on U.S. Highway 23 and on Iosco County Highway F-41. Plans currently call for \$1.5 million in Federal funds to be spent on improvement of Highway F-41. Since more than 75 percent of all trips in the area are base-related, closure of the base would probably affect the need for these improvements.

The road agency for the Wurtsmith area is the Iosco County Road Commission; in part, revenues are based on population levels. If Wurtsmith closes, the Road Commission will lose approximately \$285,000 in highway funds, about 25 percent of its total annual funds. The decrease in population probably will also affect the property tax base and the ability of the township to participate in the 50-50 statutory requirement for financing local roads.

There are six local agents of major moving and storage companies which are dependent on Wurtsmith AFB for nearly all of their business volume. Major firms and the proportion of business attributed to the base are presented in the table on the following page.

Table III-32. MAJOR MOVING COMPANIES' BUSINESS
ATTRIBUTABLE TO WURTSMITH AFB

<u>Moving Company</u>	<u>Local Agent</u>	<u>Percent of Business Volume</u> <u>Which is Base-Related</u>
Aero Mayflower Moving Service	Silver Moving & Storage	NA
Allied Van Lines	Frost Moving & Storage	70%
Atlas Van Lines	Dobson World-Wide Movers	95%
Beacon Van Lines	Banways, Inc.	95%
North American Van Lines	Dobson Van Lines, Inc.	99%
United Van Lines	Stevens Van Lines, Inc.	95%

NA: Not Available

In general, these companies indicated that they would go out of business if the base were closed. The transactions with Wurtsmith AFB are the reason most of these companies located in the area originally; services to other area customers are so minimal that impacts on community users would not be significant as a result of loss of these companies.

The most likely long-term impact on transportation would be a reduction in the frequency of rail service to the area and a deterioration in the quality and maintenance of local roads. Closure of the base will eliminate present traffic safety hazards and congestion on Highway F-41. Also, all on-base transportation problems will be eliminated.

UTILITIES (AFERN 4.4.2)

Impacts on water and sewer utility companies resulting from closure of Wurtsmith AFB would be primarily related to relocation of off-base households leaving the area. While the loss of revenue to the utility departments of Oscoda and Au Sable townships cannot be accurately determined, up to 1,013 households may leave the area. A rate increase to remaining users is anticipated in both townships; in Oscoda Township

a 20 percent increase was estimated and in Au Sable Township a rate increase up to 50 percent was estimated.

In Tawas City, there are 550 residential customers for sewer services and 575 customers for water services. Loss of approximately 28 households from the Tawas City area could reduce both sewer and water utility revenues by 2 percent. In the City of East Tawas, combined water and sewer services are provided to 970 residential customers. Loss of about 34 households from East Tawas as a result of base closure could reduce the city's utility revenues (currently about \$173,000 annually) by 2.5 percent. These losses would probably not have a significant impact on either city's utility revenues but could hasten the need for upward rate adjustments to remaining users. No impact on plans for future services in either city is anticipated.

The Consumer's Power Company would lose approximately \$1,129,219 in annual revenues from loss of direct on-base electric utility procurements. In addition, the company estimates it would lose up to \$160,000 with the loss of households, commercial businesses, etc., which would occur with base closure. Total annual revenues of Consumer's Power Company are over \$1.3 billion. Closure of Wurtsmith AFB is not expected to have a major impact on this company; utility rates to remaining users are not expected to change and there will be no affect on the company's future plans.

The Michigan Consolidated Gas Company provides service to a number of off-base residences of civilian and military personnel but does not supply gas directly to the base. It is estimated that off-base generated demand constitutes about 16 percent of the company's total load in Oscoda and Au Sable townships, and contributes about \$190,000 in annual revenues. However, due to the size of this company, the loss of revenue related to closure of Wurtsmith AFB is not expected to be significant. Rates to remaining users would not change and there would be no significant effect on this company's future plans.

Michigan Bell would lose government procurement revenues of about \$166,440 annually with the closure of the base. An additional estimated \$975,000 in revenues would be lost yearly from the 1,355 residential units on base. In addition, the loss of over 1,000 off-base households in Iosco County would result in annual revenue losses to Michigan Bell of over \$605,000. The total annual revenue loss, therefore, to Michigan Bell is estimated at over \$1,700,000. This revenue loss represents nearly 50 percent of Michigan Bell's total estimated Iosco County revenue in 1975, but less than 1 percent of Michigan Bell's total company revenue of \$1,045,831,000. Michigan Bell is the largest telephone company in Michigan. Telephone rates and service to the remaining users in Iosco County would not be expected to change with closure of Wurtsmith AFB.

Fuel oil procurements by Wurtsmith AFB totaled \$1,097,000 in fiscal year 1976; about \$540,000 of this was purchased through the Barbier Oil Company. This procurement represents about 10 percent of the total sales of fuel oil made by this company; a company representative has estimated that remaining customers in the area, primarily residential users, would not be affected by the loss in revenue to this company. Rates and services would not be altered, and additional customers could be found to make up the revenue loss from base closure.

Procurements by the base for solid waste disposal services in fiscal year 1977 are with Hager Sanitation Service. If the base were closed this company would lose approximately \$36,000 in monthly revenues, or one-fourth of their total business volume. A company representative estimated loss of service to off-base users dependent on the base could raise this impact to 33 percent of the company's total business volume. However, solid waste disposal services in the communities around the base would not be altered as a result of this company's losses.

LAND USE (AFERN 4.4.3)

See Chapter II of this statement.

AIR OPERATIONS CHARACTERISTICS (AFERN 4.5)

Implementation of the alternate action would reduce air operations to zero at Wurtsmith AFB.

CHAPTER IV. EVALUATION OF ALTERNATIVES

A. DESCRIPTION OF ALTERNATIVE ACTIONS

BASES CONSIDERED

All active Air Force Bases currently supporting SAC aircraft operations were initially screened for possible reduction or closure.

SELECTION CRITERIA

The following criteria were used during this evaluation of all B-52 and KC-135 installations:

The strategic bomber and tanker force must be responsive to worldwide Joint Chiefs of Staff tasking and, therefore, based to support the primary mission of the Strategic Air Command in support of national policies and objectives.

Missions utilizing specialized facilities or required to be stationed in a specific geographic location for military reasons must be retained.

Excess base support capability must be reduced in order to realize maximum potential savings and achieve maximum resource utilization.

Anticipated future force adjustments (both new equipment and retirement of older equipment) must be taken into account.

Bases with a capacity for expanded primary mission activities or which currently host other major command missions (a multimission base) should have a higher priority for retention.

Bases supporting strategic missile forces must be retained due to the extensive nonrelocatable facilities involved.

Military Construction Program (MCP) costs should be minimized. Therefore, installations with extensive facility deficiencies will have lower priority for retention and actions taken should generate minimum MCP requirements at other installations.

The relative impact on the human environment of the candidate action must be taken into account, along with the other criteria set out herein. These criteria are consistent with the Air Force's current policy to streamline operations by using innovative organizational and managerial methods.

APPLICATION OF CRITERIA

Robins AFB, Georgia; Seymour Johnson AFB, North Carolina; Mather AFB, California; Travis AFB, California; and Altus AFB, Oklahoma are installations supporting major Air Force missions in addition to strategic bombers and tankers. Strategic Air Command is a tenant at each of these five installations.

The Air Force Logistics Command is the host command at Robins AFB, supporting a major Air Logistics Center with extensive dedicated facilities. Robins AFB also hosts Air Force Communications Service units, Air Force Reserve Headquarters, and several reserve units. The host command at Seymour Johnson AFB is the Tactical Air Command with approximately 70 tactical fighters assigned. Mather AFB, hosted by Air Training Command, supports a Navigator Training Wing equipped with T-43 aircraft and, in the near future, will support aircrew training for Navy undergraduate navigators in addition to an Air Reserve Force KC-135 unit.

Military Airlift Command is the host at Altus, and Travis AFB's. Altus AFB is the location of the C-5 and C-141 Military Airlift training squadrons. Travis AFB is a major West Coast air terminal for personnel and logistics movement to the Pacific area and also supports extensive Reserve Force flying activities. Inactivation of a SAC wing or squadron and withdrawal of bomber and tanker missions from any of these five bases would not produce significant savings because of the substantial mission elements which would remain: therefore, they were eliminated from further study.

McConnell AFB, KS; Little Rock AFB, AK; Grand Forks and Minot AFB's, North Dakota; and Ellsworth AFB, South Dakota support strategic missile wings as well as strategic bombers and/or tankers. The geographical location of each of these bases is ideal for supporting a strategic mission. A reduction of strategic bombers and tankers at any of these locations would not permit maximum savings since the base operating support element must be retained to support the strategic missile mission which could not feasibly be relocated. Ellsworth AFB, with excellent facilities, has the capability of accepting additional aircraft. These bases, therefore, were eliminated from further consideration.

Carswell AFB, Texas; Dyess AFB, Texas; and March AFB, California all support B-52D and KC-135 aircraft. All three Strategic Air Command bases support a major Air Force mission in addition to a strategic bomber and tanker mission. Carswell AFB, in addition to supporting two B-52D and one KC-135 squadron, supports Air Force Plant No. 4 and trains all B-52D combat crews.

Air Force Plant No. 4, an industrial plant for the design, development, and high rate production of aerospace weapon systems, is contiguous with Carswell AFB and jointly uses the airfield facilities of

that base. In addition, Carswell and March AFBs support Air Reserve Force flying units, and Dyess AFB hosts a C-130 Tactical Airlift Wing. The geographical location of each of these bases provides excellent operational flexibility. Their proximity to several tactical fighter units enhances the command's capability to provide lateral command air refueling support in the Southwest United States. Each base has excellent facilities with a capacity for more aircraft than other smaller installations. These three bases were eliminated from further study.

Pease AFB, New Hampshire, and Plattsburgh AFB, New York support both FB-111 and KC-135 operations. Closing these bases would require the redistribution of FB-111 aircraft. Because the FB-111 requires unique facilities such as flight simulators, avionics test stations, and stationary sound suppression equipment not available at other locations, the Military Construction Program resulting from a redistribution of aircraft would require large dollar expenditures. The geographical locations of both bases provide operational flexibility for employment of strategic forces in both an Emergency War Order and conventional role. Due to the operational application of the FB-111 weapon system, it is essential that this aircraft be located in the Northeastern United States because of accessibility to specially targeted areas. Both installations are capable of holding large numbers of aircraft and are considered operationally essential. Pease AFB and Plattsburgh AFB were thus eliminated from further considerations.

A review of the potential economies of relocating U-2 aircraft from Davis Monthan AFB, Arizona, to Beale AFB, California, and assigning the management of high altitude manned reconnaissance missions to one organization was initiated in July 1975. The criteria used for this review were cost effectiveness and feasibility. Results indicated that 14 B-52G aircraft assigned to Beale AFB could be placed in non-operating active status because of the increased numbers of aircraft involved in depot modification programs required to maintain the B-52

as a first-line strategic aircraft. Therefore, the B-52G squadron was inactivated on September 30, 1976 and the U-2 unit moved from Davis Monthan AFB to Beale AFB, thus taking advantage of existing facility capabilities and avoiding extensive construction costs. Therefore, Beale AFB was eliminated from further consideration.

Offutt AFB, Nebraska, is the location of Strategic Air Command Headquarters which requires a substantial, difficult-to-replace, command control communications network. Any relocation of this headquarters would be costly and involve significant difficulties to avoid disruption of the essential command control functions. Additionally, several tenant organizations are housed on Offutt AFB such as the 55th Strategic Reconnaissance Wing which maintains several different types of reconnaissance and airborne command and control aircraft. Cost to duplicate the facilities at Offutt AFB would be prohibitive and, therefore, substantially increase the one-time cost of reducing this installation. Offutt AFB was not given further consideration.

Barksdale AFB, Louisiana has the largest number of B-52G and KC-135 aircraft assigned of any strategic bomber and tanker base. Tankers assigned to this installation play a key role in SAC's air refueling mission, particularly lateral command support. A Strategic Air Command Numbered Air Force Headquarters is located at Barksdale AFB. Additionally, one of the major Air Force weapons storage areas is located at Barksdale AFB, and the base hosts extensive Air Reserve Force flying activities. Cost to duplicate the facilities at Barksdale AFB would be prohibitive and, therefore, substantially increase the one-time cost for reducing this installation. For these reasons, Barksdale AFB was eliminated from further study.

Fairchild AFB, Washington was eliminated because of its geographical location. One B-52 squadron and two KC-135 squadrons are needed at Fairchild AFB to supply military operations against specially targeted

areas which are more readily accessible from this geographical region. Other military installations are not available in this geographical region to offset or replace the facilities at Fairchild AFB. Additionally, the Air Force Survival School and an Air National Guard KC-135 unit (eight aircraft) assigned to Fairchild AFB would require expensive military construction to be duplicated at another location. Fairchild AFB was eliminated from further study for the reasons cited.

Castle AFB, California is currently utilized as the Combat Crew Training location for all B-52G/H and KC-135 crew members. Facilities are excellent, and the installation has the capacity for an increased mission. The 84th Fighter Interceptor Squadron (FIS) (Aerospace Defense Command) with 18 F-106 aircraft is also located at Castle AFB. Operational considerations for the Combat Crew Training Squadron, expansion capability, and excellent facilities led to eliminating Castle AFB from further study.

Rickenbacker AFB, Ohio has multiple missions assigned: an active Air Force strategic tanker wing, Air National Guard tactical fighter squadron with 18 A-7 aircraft, an Air National Guard air refueling squadron with eight KC-135 aircraft, and two Air Force Reserve tactical airlift squadrons with 32 C-123 aircraft. Relocation of the units at Rickenbacker AFB would require extensive military construction. Additionally, the Air Reserve Force would be denied an area with a large recruiting potential and, consequently, could suffer from a loss of available manpower. For these reasons, Rickenbacker AFB was eliminated from further consideration.

Grissom AFB, Indiana is a centrally located tanker base which provides Single Integrated Operational Plan utility and lateral command air refueling support. Grissom AFB is an excellent operational and geographical location for six assigned airborne command and control aircraft. In addition to strategic tankers, 42 A-37 aircraft of the Air Force Reserve are located at Grissom AFB. The closure of Grissom AFB

would require the relocation of its strategic mission and the Air Force Reserve. For the reasons iterated, Grissom AFB was eliminated from further consideration.

Griffiss AFB, New York, a multimission base, has strategic tanker and bomber forces which provide operational flexibility for employment in both a Single Integrated Operational Plan and conventional role because of the base's geographic location. Withdrawal of these assets could be accommodated, from an operational point of view, without jeopardizing operational flexibility only if a strategic bomber and tanker mission were to be retained at Loring AFB, Maine. It is essential that a portion of the strategic bomber and tanker force be located in the Northeastern United States because of accessibility to specially targeted areas. Other military installations are not available to offset a reduction of strategic forces from both Griffiss and Loring AFBs. The Rome Air Development Center (AFSC), Northern Communications Region (AFCS), and the 49th FIS (ADCOM) with 18 F-106 aircraft are tenant units at Griffiss AFB. Each of these units' activities are considered essential; therefore, if Griffiss AFB were to close, these activities would need to be relocated to other installations thereby incurring excessive costs. For these reasons Griffiss AFB was eliminated from consideration.

The strategic bomber and tanker forces located at K. I. Sawyer AFB, Michigan provide excellent flexibility to the Emergency War Order. In addition to the strategic bomber and tanker forces, K. I. Sawyer is a multimission base that supports an 18 UE F-106 unit (ADCOM) that provides an air defense posture for the central United States that is essential. Closure of K. I. Sawyer AFB would require relocating the F-106 aircraft to a base in the same geographical area. Currently, K. I. Sawyer AFB has 16 B-52H and 20 KC-135 aircraft assigned. Facilities are available and the base could accept an additional four B-52H aircraft. This capability provides a flexibility at K. I. Sawyer AFB which is not available at Kincheloe AFB. For these reasons,

K. I. Sawyer AFB is considered operationally essential and, therefore, eliminated from further study.

Loring AFB, Maine has been identified as a candidate for reduction to a forward operating base status. The 14 B-52G aircraft would be re-located to other installations that support the same weapon systems. The 30 KC-135 aircraft assigned to Loring AFB would be transferred to the Air Reserve Force. Selected tenant organizations would be retained because of special mission requirements and a strategic wing activated to maintain the base as a forward operating location supporting day-to-day alert operations and capable of supporting large-scale contingency operations. Loring AFB was eliminated from further consideration for closure.

Blytheville AFB, Arkansas is one of four B-52G/H bases that is not multimission. Loring, Kincheloe and Wurtsmith AFB's are the others. Strategic forces assigned to Blytheville AFB provide excellent operational flexibility owing to geographical location. Additionally, the current bomber and tanker mission at Blytheville AFB is considered essential because the tankers support lateral command air refueling requirements in the Southeastern region of the United States. The proximity of Blytheville AFB to large tactical fighter installations provides for more economical air refueling support to these forces while keeping the tankers positioned to support the bomber force. At the same time, the bomber aircraft are located sufficiently close to primary target areas for effective utilization.

The net annual savings realized from closing Blytheville AFB would be \$4.1 million less than closing Kincheloe AFB. For the reasons cited, Kincheloe AFB appears to be a more attractive candidate for closure than Blytheville AFB. Blytheville AFB was, however, examined in greater detail as an alternative because it is a single mission base.

Wurtsmith AFB is another of the B-52G/H bases that does not have a multimission. The geographical location of Wurtsmith AFB provides excellent operational flexibility and the facilities are in generally good condition. Currently Wurtsmith AFB has 16 B-52H and 16 KC-135 aircraft authorized.

Climatological conditions are more favorable at Wurtsmith than at Kincheloe. For example, the annual mean snowfall is 58 inches per year compared to 107 inches per year at Kincheloe. Since heavy snowfalls are a less frequent occurrence at Wurtsmith than at Kincheloe, fewer operational restrictions and mission degradations are experienced. Additionally, the wind chill factor, an important factor in winter operations on the flightline, reaches the critical point less frequently at Wurtsmith. Due to operational considerations, weather, and condition of facilities, Wurtsmith is a less attractive candidate for closure than Kincheloe. However, since Wurtsmith is a single mission base, it was examined in greater detail as an alternative.

A related action is the proposed reduction of Loring AFB, Maine. In that proposal, Wurtsmith AFB is also considered an alternative. The strategic bomber and tanker forces at both Kincheloe and Wurtsmith are in a geographical location that provides excellent flexibility in the Single Integrated Operational Plan. Withdrawal of forces from either of these bases could be accommodated without an insurmountable impact upon strategic capability but the closure of both is not considered acceptable. Thus, if Wurtsmith were to be selected for closure as an alternative to the proposed Loring reduction, then Kincheloe could not be considered for closure. Since Kincheloe is a single mission base which lacks expansion capability without considerable expenditures, it was identified as a candidate installation for closure. Although Kincheloe has some modern facilities, others need to be repaired or replaced. This would mean an extensive rehabilitation program which would have to be undertaken to support the present

mission. The current base loading of 16 B-52H and 16 KC-135 aircraft is considered maximum. The petroleum, oil, and lubricant facilities are at full capacity and would require expansion to accept additional missions. To expand facilities to accept added missions or to upgrade existing facilities, large capital investments through military construction funding would be required during Fiscal Years 1978-82. Geographical location and annual weather profile make the base unsuitable to support other missions such as airlift, training, or tactical fighter operations. The foregoing considerations resulted in the nomination of Kincheloe AFB as a candidate for closure.

CANDIDATE ACTION

The proposed candidate action is to inactivate the 449 BMW and its supporting organizations and close Kincheloe AFB, Michigan by the end of Fiscal Year 1977, declaring the base excess to Air Force requirements. The details of this action can be found in Chapter I.

Alternative No. 1

Alternative No. 1 is to relocate active forces and activities presently assigned to Wurtsmith AFB and close the base by the end of Fiscal Year 1977. The assigned aircraft (16 B-52H, 16 KC-135) would be distributed in the same manner as in the candidate action. The manpower impact of this proposal would be the elimination of approximately 3,900 personnel (3,100 military, 800 civilian) at Wurtsmith AFB. Initially a caretaker force of approximately 320 (160 military, 160 civilian) would be programmed, however, the actual strength would depend on requirements.

Alternative No. 2

The second alternative is to relocate active forces and activities presently assigned to Blytheville AFB (14 B-52G, 15 KC-135) and close the base by the end of Fiscal Year 1977. The assigned aircraft would

have basically the same disposition as in the candidate action providing that the decision is made to reduce Loring AFB to a forward operating base. In the event that Loring AFB is not reduced, the 14 B-52Gs would be redistributed to nine other locations. The KC-135 aircraft would still be transferred to the Air Reserve Force. The manpower impact of this proposal would be the elimination of approximately 3,500 personnel (2,800 military, 700 civilian) at Blytheville AFB. Initially a caretaker force of approximately 320 (160 military, 160 civilian) would be programmed, however, the actual strength would depend on requirements.

Alternative No. 3

No action or 'status quo' is the third alternative and is not desirable. It fails to achieve potential savings identified through reduction of excess basing capacity and associated reductions in manpower authorizations. The Air Force review of its missions revealed that force adjustments would permit the Air Force to consolidate units and reduce the number of active strategic bomber and tanker bases. These adjustments include transferring the aircraft resources of one B-52 squadron to nonoperating active status, deleting the associated manpower, and accelerating the previously announced transfer of 128 KC-135 aircraft to the Air Reserve Force. Additionally, the Air Force has insured, based on the current threat and world conditions, that our strategic bomber and tanker forces are able to survive and retaliate.

Thus, "no action" fails the criteria of excess capacity reduction and the generation of savings. It satisfies the retention of expandable facilities criterion but at the cost of the criteria discussed above. It shows no responsiveness to programmed force adjustments. In the light of the criteria and objectives addressed in this review, the "no action" option is unsatisfactory.

IV.B. COMPARATIVE ANALYSIS OF IMPACTS OF VIABLE ALTERNATIVES - SUMMARY

The candidate action at Kincheloe AFB, Michigan, or the alternative realignment actions at Wurtsmith AFB, Michigan or Blytheville AFB, Arkansas, would result in a variety of direct and indirect impacts on the region surrounding each base. The quantitative magnitudes for many of these impacts have been presented serially for each base in Chapter III. Impacts that cannot be quantified have been treated in a qualitative fashion:

To provide a comparative framework for evaluating the relative impacts of the candidate action and its alternates on their respective regions, this chapter arrays the principal environmental impact descriptors and the relative magnitude of impact in each area. Where possible, impacts on the Primary Impact Area as a whole and constituent civil divisions that would be particularly impacted are included.

In the pages which follow, quantifiable impacts which can be evaluated in comparable terms are presented for each impact region. These comparisons are presented for the following major descriptors: population loss, direct and indirect employment losses, unemployment rates, total personal income, base procurements, housing vacancy rates, public school enrollments and revenue losses, and retail sales impacts.

For other impact categories that cannot be readily compared in quantitative terms, narrative summaries of the principal impacts are recapitulated.

Population Loss

Each impacted area will experience a direct population loss due to the proposed action at its subject base. The estimated direct population loss would consist of both the military personnel and their dependents

who would be transferred out of the area and 62 percent of the civilian Department of the Air Force Appropriated Fund employees and their dependents who are expected to find new federal employment positions in other geographic areas. The projected direct population losses in each of the Primary Impact Areas are summarized in the table below.

Table IV-1. ESTIMATED TOTAL DIRECT
POPULATION LOSSES

<u>Base</u>	<u>Primary Impact Area</u>			<u>Communities Significantly Impacted 1/</u>		
	<u>1976</u> <u>Population</u>	<u>Estimated Loss</u> <u>Number</u>	<u>Percent</u>	<u>1976</u> <u>Population</u>	<u>Estimated Loss</u> <u>Number</u>	<u>Percent</u>
Kincheloe AFB	36,350	8,670	23.9%	29,660	8,360	28.2%
Wurtsmith AFB	30,800	8,680	28.2%	21,650	8,660	40.0%
Blytheville AFB	60,500	7,680	12.7%	27,100	7,610	28.1%

1/ Refer to Tables III-2, III-13, and III-23.

Population losses in Primary Impact Areas range from 7,680 at Blytheville, the smallest of the bases, up to 8,680 at Wurtsmith. The losses, when taken as a percentage of the population in the communities where significant impacts are anticipated, range from a high of 40 percent at Wurtsmith to approximately 28 percent for both Kincheloe and Blytheville.

Employment

Realignment actions would cause both direct and indirect employment losses in the Primary Impact Area of each base. While the majority of total job losses will result directly from the proposed realignment action, indirect losses will also be evident. These losses will be concentrated in the civilian employment sector and particularly impact the Trade, Services, and F.I.R.E. (Finance, Insurance, and Real Estate) sectors. In all cases, the losses will be significant. A comparison of total employment losses in the Primary Impact Area of the candidate and alternate bases is presented in the table on the following page.

Table IV-2. ESTIMATED TOTAL EMPLOYMENT
LOSSES IN PRIMARY IMPACT AREAS

<u>Base Impact Area</u>	<u>Direct</u>	<u>Indirect</u>	<u>Total</u>	<u>Percent of Total Employment</u> ^{1/}
<u>Kincheloe AFB</u>				
Military (.14 net multiplier)	3,074	430	3,504	31.6%
Civilian (.77 net multiplier)	<u>737</u>	<u>567</u>	<u>1,304</u>	<u>11.8</u>
Total	3,811	997	4,808	43.4%
<u>Wurtsmith AFB</u>				
Military (.28 net multiplier)	3,103	869	3,972	37.7%
Civilian (.90 net multiplier)	<u>550</u>	<u>495</u>	<u>1,045</u>	<u>9.9</u>
Total	3,653	1,364	5,017	47.7
<u>Blytheville AFB</u>				
Military (.36 net multiplier)	2,830	1,019	3,849	15.6%
Civilian (.56 net multiplier)	<u>617</u>	<u>346</u>	<u>963</u>	<u>3.9</u>
Total	3,447	1,365	4,812	19.5%

^{1/} Includes both military and civilian employment.

As indicated, total employment losses range from approximately 4,800 to 5,400 in the Primary Impact Area of the respective bases. Losses of this magnitude constitute substantial portions of the total military and civilian employment in these areas. It must be emphasized, however, that these losses represent the 'worst case' examples. No allowance has been made for the fact that some of these jobs are held by the dependents of departing military personnel, some of those becoming unemployed may choose to retire, and some of those becoming unemployed as an indirect result of base closure may choose to relocate out of the Primary Impact Area.

Based on the above considerations, it was possible to calculate the 'worst case' civilian unemployment rates which would result from the proposed base realignments. By adjusting the civilian labor force to reflect the expected departure of approximately 60 percent of the

Department of the Air Force Appropriated Fund personnel, the following profile emerged.

Table IV-3. ESTIMATED UNEMPLOYMENT IN THE
PRIMARY IMPACT AREAS

<u>Base Impact Area</u>	<u>1976 Baseline</u>		<u>Post-Action</u>		<u>National Unemploy- ment Rate^{1/}</u>
	<u>Civilian Labor Force</u>	<u>Unemploy- ment Rate</u>	<u>Civilian Labor Force</u>	<u>Unemploy- ment Rate</u>	
Kincheloe AFB	11,225	18.7%	10,908	31.9%	8.0%
Wurtsmith AFB	8,425	11.9%	8,162	32.5%	8.0%
Blytheville AFB	23,475	7.2%	23,247	14.6%	8.0%

^{1/} Estimated average annual unemployment rate in 1976.

It is evident from the above table that the proposed realignment actions would have dramatic effects on the unemployment rates in each of the Primary Impact Areas. In all cases, post-action unemployment would increase significantly over the baseline rates. Assuming a national unemployment rate of 8 percent, post-action rates would be substantially higher. These resultant unemployment rates range from 14.6 percent (nearly twice the national average) in the Blytheville AFB Primary Impact Area to 32.5 percent (four times the national average) in the Wurtsmith AFB Primary Impact Area. Although these rates represent the 'worst case' examples, the impact of the proposed realignment on the employment bases of the Primary Impact Areas would be severe in all cases.

Base Payrolls and Total Personal Income

In all instances, the payroll generated directly by the subject base constitutes a significant percentage of total personal income in the Primary Impact Area. This percentage ranges from 12.3% in the Blytheville Primary Impact Area to 26.1% in the Primary Impact Area of Wurtsmith AFB. A comparison of base payrolls and Primary Impact Area total personal incomes is presented in the table on the following page.

Table IV-4. BASE PAYROLL CONTRIBUTION TO
TOTAL PERSONAL INCOME IN THE
PRIMARY IMPACT AREAS (\$ MILLIONS)

	<u>Estimated 1975 Total Personal Income</u>	<u>Annual Amount</u>	<u>Base Payroll Percent of TPI</u>
Kincheloe AFB	\$161.1	\$36.3	22.5%
Wurtsmith AFB	\$139.7	\$36.5	26.1%
Blytheville AFB	\$282.0	\$34.6	12.3%

If the proposed closure actions are implemented, the economies of the Primary Impact Areas will experience a direct loss of the base payrolls from the level of total personal income. Because it is basic income, the direct loss of this payroll income will generate a secondary round of income losses. Although not quantified, these losses will be substantial in all cases.

Procurement and Construction Awards

The proposed realignment actions at the candidate and alternate Strategic Air Command bases would also result in the loss of income from both locally purchased procurements and locally awarded construction contracts. If the proposed action or alternatives are implemented, the total amount of this basic income will be withdrawn from the Primary Impact Area economies.

Table IV-5. ESTIMATED LOSS OF PROCUREMENT AND CONSTRUCTION
AWARDS, PRIMARY IMPACT AREAS (\$000's)

	<u>Non-Construction Procurement Awards</u>	<u>Annual Average Construction Awards</u>	<u>Total</u>
Kincheloe AFB	\$5,536.5	\$326.5	\$5,863.0
Wurtsmith AFB	\$3,177.8	\$630.3	\$3,808.1
Blytheville AFB	\$6,076.2	\$697.1	\$6,773.3

As indicated, total procurement and construction award income lost to the Primary Impact Area economies ranges from \$3.8 million at Wurtsmith AFB to \$6.8 million at Blytheville AFB. The attending indirect job losses would be concentrated largely in the Trade, Services, and TCU (Transportation, Communications and Utilities) sectors. At Blytheville, these losses will be concentrated in those occupations related to the 'travel of things' and commissary/exchange supply. At both Kincheloe and Wurtsmith, these losses will be concentrated in those Trade sector occupations related to the provision of commissary/exchange supplies. In addition, the construction occupations will be severely impacted in each case.

Housing Vacancies

The departure of off-base military and civilian households will impact the housing market of each base's Primary Impact Area. In all cases, the baseline market vacancy rate will be nearly tripled by the closure of the subject base. Estimated housing vacancy rates resulting from proposed base closure are presented in the following table.

Table IV-6. ESTIMATED HOUSING VACANCY RATES

<u>Base Impact Area</u>	<u>1976 Baseline</u>			<u>Post-Action</u>		
	<u>Occupied Units</u>	<u>Vacant Units</u>	<u>Vacancy Rate</u>	<u>Occupied Units</u>	<u>Vacant Units</u>	<u>Vacancy Rate</u>
Kincheloe AFB	9,960	469	4.5%	8,950	1,459	14.0%
Wurtsmith AFB	8,881	392	4.5%	7,800	1,473	15.9%
Blytheville AFB	19,812	692	3.4%	18,452	2,052	10.0%

Because of its size, the Blytheville housing market will experience the largest absolute increase in vacancies but the smallest resultant increase in its vacancy rate. The vacancy rate in the Kincheloe AFB and Wurtsmith AFB housing markets will also increase substantially and exceed normal market tolerance levels by a wide margin.

Public School Enrollments

The departure of military and civilian personnel and their dependents will result in a loss in public school enrollment. Such a loss would have direct implications for the level of funding which each school district receives in the form of Federal Impact Aid (PL 81-874) and state aid. The following table presents enrollment and estimated losses in all the impacted districts and the school district where the most significant impact is anticipated.

Table IV-7. ESTIMATES OF PUBLIC SCHOOL ENROLLMENT LOSSES

<u>Base</u>	<u>All School Districts Impacted</u>			<u>School Districts Significantly Impacted</u>		
	<u>1976 Enrollment</u>	<u>Estimated Loss Number</u>	<u>Percent</u>	<u>1976 Enrollment</u>	<u>Estimated Loss Number</u>	<u>Percent</u>
Kincheloe AFB	7,822	1,627	20.8%	2,167	1,437	66.3%
Wurtsmith AFB	5,926	1,810	30.6%	3,954	1,770	44.8%
Blytheville AFB	7,242	1,289	17.8%	1,673	1,099	65.7%

The estimated number of students lost ranges from 1,289 in the schools serving Blytheville AFB to 1,810 in the school districts serving Wurtsmith AFB. When the estimated losses are considered as a percentage of enrollment in the individual school district most directly impacted, both the Rudyard School District (KAFB) and the Gosnell School District (BAFB) are estimated to lose about 66 percent of their students while Oscoda (WAFB), which has a larger total enrollment base, will lose about 45 percent of its students.

Retail Sales

The closing of the candidate base or either of its alternatives will directly reduce the level of retail sales in the subject areas. Even with a large portion of retail expenditures attributable to base BX and commissary sales, substantial losses in civilian sector

establishments are anticipated. The amounts which will be directly lost are indicated in the table below.

Table IV-8. ESTIMATED DIRECT RETAIL SALES
LOSS (\$000)

<u>Base Impact Area</u>	<u>Total Retail Sales</u>	<u>Sales to Base Personnel</u>	<u>Percent of Total</u>
Kincheloe AFB	\$ 79,656	\$10,786	13.5%
Wurtsmith AFB	\$ 71,897	\$ 8,419	11.7%
Blytheville AFB	\$160,604	\$10,454	6.5%

As indicated, the retail establishment in each base's Primary Impact Area will experience substantial losses in retail sales revenue. These direct losses will in all cases be supplemented by losses resulting from indirect employment and personal income declines.

Government

In all three areas that would be affected by the candidate action or its alternates, no changes in the forms of local government or jurisdictional boundaries are anticipated. The local governments most directly affected, however, would undergo the stresses associated with population and revenue losses, realignments in public services requirements, property value declines, etc.

Moreover, local governments and their regional agencies would be confronted with the necessity to develop and implement mitigative measures and recovery strategies. Apart from these generalizations which are applicable to the local governments in each of the Primary Impact Areas, no differentiations among the three in the scale of impact can be made.

Community Services and Facilities

The communities near each of the three bases under study would undergo adverse community service and facility impacts. They would lose the benefits of cooperative and mutual aid agreements in the areas of police and fire protection as well as the voluntary participation of base personnel in these and other community service activities. The participation of base personnel in religious, civic and charitable organizations would be lost as well as their financial contributions.

Each impacted area will lose the available manpower pool provided by dependents of military personnel due to the proposed action at its subject base. These dependents have traditionally worked throughout the community in numerous occupations such as teaching, nursing, clerical and business activities and in both technical and non technical career fields.

The financial institutions in each area would lose the demand and savings account deposits of departing base personnel and be similarly affected by indirect employment and income losses. Delinquencies and default rates on personal, home improvement and mortgage loans may increase somewhat as a result of financial hardships on households in the community.

Military retirees residing in the areas affected would lose the benefits of base commissary, exchange and medical service privileges and be required to travel greater distances to take full advantage of these ancillary benefits.

Since all these impacts are inherently unquantifiable, differential impacts on the Kincheloe, Blytheville and Wurtsmith Primary Impact Areas cannot be determined.

Transportation

In all three Primary Impact Areas, moving and storage companies heavily dependent on base-related business would be adversely affected. Since such a large part of their revenues is base-related, many would go out of business following base closure.

In some cases, base closure would alleviate localized traffic congestion and obviate the need for planned improvements. In others, base closure and resultant population losses would reduce state maintenance and construction funding.

Utilities

In every case, base closure and resulting direct and indirect population losses would adversely affect the revenues of public utilities. Some losses are directly attributable to base procurement while others stem from residential service connections to the housing of base personnel. Revenue declines would accrue to telephone, gas and electric utilities, municipal water and sewer agencies as well as private contractors providing waste collection, fuel and other services.

Since quantitative measures are not available in every instance and frequently are not comparable when quantitative values have been estimated, comparative impacts among the three bases cannot be succinctly evaluated.

Summary

As the foregoing comparisons indicate, the proposed closure of Kincheloe AFB or either of the alternatives would severely impact the surrounding area in all cases. Unemployment rates would rise drastically, local businesses would endure economic hardships, real estate values would decrease, and school budgets would suffer the loss of federal and other enrollment-related funds, to mention but a few of the more prominent impacts. In other words, the closure of any of the major Air Force installations considered will have a significant adverse impact on the surrounding area in a broad array of categories.

CHAPTER V. PROBABLE ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE
AVOIDED SHOULD THE PROPOSAL BE IMPLEMENTED

In this section of the report, a brief summary of those probable impacts which may be considered adverse and unavoidable is presented. All of these impacts have been estimated based on the "worst possible" case and are summarized by five major functional categories for each of the three Strategic Air Command bases. The general course of the economic repercussions of a base closure on a local economy is traced in the paragraphs below, followed by a detailed discussion of impacts at each base.

Upon closure of a major military installation, the direct loss of jobs, personal income, and procurement will lead to secondary job losses in all sectors of the local economy. As these job losses take place, they will create their own cycle of indirect job losses in a continuing process until the full impact of the action has been felt and the economy stabilized. Experience with the closure of other military installations indicates that this cyclical process takes from six months to one year before it bottoms out. This period varies, of course, depending on the state of the local economy at the time of closure, the time phasing of the action, and the mitigating measures adopted.

As base operations wind down, businesses which provide goods and services to the base, its personnel, or its dependents, will find that a large portion of their market is gone and many may be forced to close. As more people become unemployed and opportunities for employment in the area decrease, households may begin to leave the area in search of new opportunities. This indirect loss in population would cause a further decrease in demand for services and possibly further unemployment.

In conjunction with the loss of employment, the area would experience a decrease in total personal income. This loss will be directly attributable to the substantial payroll losses experienced with base closure and will be supplemented by income losses associated with the

indirect job losses. This decrease in the level of total personal income will have reverberations which will be felt throughout several sectors of the overall economy.

The housing market, already strongly impacted by the high vacancy rate caused as a direct result of the base closure, may be further impacted by additional losses of population in the area. These population losses and the resultant decreases in total personal income could lead to a further softening of demand in the overall housing market. Because of the 'depression psychology' which tends to manifest itself after a base closure, it appears that major housing impacts will be felt in the short-term. While this short-term increase in housing vacancies and the potential softening of demand would have an adverse impact, there is a mitigative step that can be taken to help offset the potential loss in resale value of vacated housing for Defense Department employees. The Department of Defense Homeowners Assistance Program provides a guarantee of 95 percent of the pre-announcement appraised value (to DOD employees only) who must sell their homes, or a purchase guarantee at 90 percent of the appraised value if not sold privately after one year.

The public financial structure of the Primary Impact Area communities will also be affected by a base closure. It has been stated that in most cases, impact area communities will experience a loss of various federal and state revenues which are dependent on several socioeconomic variables. Among these variables are population levels, per capita incomes and taxes. All of these will be impacted to an extent by a base closure. Also, as people leave the impact area, the demand for public services and, therefore, user charge revenues would decline. However, the fixed cost infrastructure will still be present. This could entail deficit spending at the local government level, an increase in user charges for the remaining population, or the cutback of service levels as available funds are diverted for debt service retirement. Another major source of revenue, property taxes, would be minimally affected. If there is a general deterioration in the property values of owner-occupied houses, however, subsequent property reevaluation would initiate a change in

property taxes. Either the Federal government, absentee owners, financial institutions, or subsequent buyers of houses would continue to pay real estate taxes at the current assessed value or would make payments in lieu of taxes.

Educational facilities would be impacted by the loss in enrollment which leads to reductions in federal and state operating aid funds. This cutback in funds could seriously jeopardize the ability of some systems to function as viable entities.

Cutbacks in both personnel and facilities/services would be likely. Both private institutions and those institutions of higher learning located in the impact areas would also experience losses of both physical and financial resources.

Various community services and facilities will be adversely impacted by a base closure. Numerous cooperative agreements which exist between the bases and surrounding communities for police and fire protection would cease to exist. In addition, the departure of base-related dependents could quite often lead to losses of key professional personnel in both the medical and educational sectors. Such losses could lead to an overall deterioration in the 'quality of life' enjoyed in the impact areas.

In the following paragraphs, a detailed discussion of impacts of each base is presented. This discussion will focus upon the on-base employment losses, disruption of local institutions, reduction of local economic activity and business volumes, reduction of public revenues, disruption of public service patterns and activity systems, and the disruption of real estate markets and land use experienced in the Primary Impact Area of each base.

A. Kincheloe AFB

On-Base Employment Losses

A direct loss of 3,074 military and 737 FTE civilian personnel would have an immediate direct effect on the local economy and would induce other, indirect employment losses. These 'worst case' employment losses would result in a civilian unemployment rate of approximately 32 percent.

Disruption of Local Institutions

Local governmental units would be severely disrupted and future activities constrained due to losses in local population and accompanying losses in financial and labor resources for governmental functions. The broad socioeconomic impacts which will accompany the action will alter past planning assumptions for all levels of government. New goals and directions will be necessary, particularly for areawide economic recovery measures. Many community services of local governments will lose valuable leadership provided by the Kincheloe AFB personnel and their dependents.

Reduction of Local Economic Activity and Business Volumes

The proposed action would precipitate a direct loss of payroll income in the Primary Impact Area. This loss in payroll income would be supplemented by decreases in total personal income and will have repercussions which will be felt throughout the local economy.

The loss of base procurement awards worth almost \$5.9 million to the local economy would adversely impact those businesses which have been specifically developed to serve the military establishment in the region.

Although a large portion of military retail sales are made on base, local retailers would experience a direct loss in sales due to the

departure of Kincheloe AFB personnel and their families. Many retailers in the area could be forced out of business by a reduction in retail sales and disposable income. Past experience with base closures has shown that retailers engaged in the sale of shoppers' goods are most affected by a large-scale withdrawal.

There would be a loss of bank deposits due to both direct and indirect employment losses. This could reduce the funds available for new mortgages and other economic stimulant loans on the part of local lending institutions. In the worst case it could lead to defaults as bank obligations become due.

Reduction of Public Revenues

Three school districts will experience the loss of both federal and state operating aid. One of these districts, Rudyard, would experience a loss in excess of \$2 million.

A reduction in public utility revenues would occur as a result of a decrease in usage. This reduction could cause an increase in user charges to the remaining population. Reduced user charge revenues may jeopardize payback schedules on any outstanding revenue bonds which were used to finance the construction of public utilities.

There could be a slight change in revenue sharing funds in Chippewa County due to decreases in population and changes in per capita income.

Disruption of Public Service Patterns and Activity Systems

The elimination of certain services which had been cooperatively provided (such as medical, police, fire and air traffic control) could necessitate increased public sector investment to ensure that these services remain available to the local population.

The reduction in demand for public utilities may delay planned extensions of such services to the more remote areas, thereby depriving the local population of services from which they could otherwise have benefited.

The primary adverse effects on transportation facilities will be a reduction in the frequency of air and truck service to the impact area, and an estimated 42 percent loss in county and city funds for maintenance and improvement of local roads.

Revenue losses to utility companies serving the impact area will be unavoidable. Revenue losses will generally not result in higher rates to remaining customers, with the exception of losses to water and sewer utilities. Loss of 11 percent of the residential sewer and water users in Sault Ste. Marie will hasten the need for a rate increase to remaining customers.

Disruption of Real Estate Markets and Land Use

There would be an increase in private housing market vacancies, particularly over the short run. This may result in the reduction of housing market values, particularly as supply would far exceed demand in Chippewa County.

Existing transient lodging facilities may experience a decrease in their patronage due to the proposed closure, particularly since a portion of tourism in the area consists directly of visiting families of servicemen.

Primary adverse impacts on land use will relate to changing land values. Due to impacts on the housing market and regional income losses, some lands developed for residential or commercial use or in transition toward more intensive use will decline considerably in value. Land ownership turnover of some residential and commercial properties may lower investments in these properties which will further decrease land

values, particularly in the Kinross-Rudyard area. Land use plans and policies will need to be reassessed with entirely new assumptions about growth parameters in the impact area.

B. Blytheville AFB

On-Base Employment Losses

The direct loss of 2,830 military and 617 (FTE) civilian personnel would have an immediate and direct short-term impact on the local economy. These losses would induce employment losses throughout the economy as the "multiplier effect" becomes evident.

Disruption of Local Institutions

Local governmental units would be severely disrupted and future activities constrained due to losses in local population and accompanying losses in manpower and financial resources for government functions. Area communities will lose valuable leadership and the experience provided by base personnel and their dependents. The adverse socio-economic changes which this action would create would alter past planning assumptions for all levels of government. New goals and directions will be necessary, particularly for areawide economic recovery measures.

Reduction of Local Economic Activity and Business Volumes

A closure action would cause a direct loss of population and payroll income as well as indirect losses of personal income.

The loss of base procurement and construction awards would adversely impact those businesses which have been specifically developed to serve the military establishment in the region. Small specialized firms would be particularly impacted.

The retail sector in Mississippi County would experience a drop in sales largely as a result of the induced decreases in payroll and personal expenditures. Although a significant portion of military retail sales are made on-base, there would also be some direct loss in the local economy attributable to their departure.

There would be a loss of bank deposits due to both direct and indirect employment losses. This loss of deposits would reduce the availability of money for economic stimulus loans.

Reduction of Public Revenues

Blytheville School District #5 (Gosnell) would experience a 10 percent decline each year in the amount of Federal Impact Aid funds as a result of the decline in military-related enrollees. This reduced funding would occur through Fiscal Year 1978 when the present law expires--unless extended.

A reduction in public utility revenues would result due to a decrease in usage. This reduction would cause an increase in user charges for those persons who remain. Reduced user charge revenues could jeopardize payback schedules on outstanding revenue bonds which were used to finance the construction of public utilities.

There could be a minimal reduction in federal revenue-sharing funds as a result of decreases in per capita income and population.

Disruption of Public Service Patterns and Activity Systems

The decrease in user charge revenues for public utilities could lead to a situation in which the bonding capacity of local utilities is changed. This could adversely affect any planned improvements or modifications to the system.

Revenue losses to utility companies serving the impact area will be unavoidable. However, these losses are included in the regional analysis. Revenue losses will generally not result in higher rates to remaining customers, with the exception of losses to local water and sewer utilities. In Gosnell, there will be a loss of 50 percent of the residential water and sewer utility customers. The Gosnell Water Association and the City of Gosnell may be unable to cover their bond obligations for financing new water and sewer facilities. The City of Blytheville may lose 14 percent of their residential water and sewer customers which would hasten the need for upward rate adjustments to remaining users of these utilities.

The Blytheville River Rail Terminal Company would close and auxiliary uses of their terminal dock facilities would be lost.

Disruption of Real Estate Markets and Land Use

There would be increased vacancies in the private market, especially over the short run. Such an increase in vacancies could lead to a series of related social problems.

There would be a decrease in private investor demand over the short run. Whereas speculative development may have contributed significantly to new housing development in the past, it is expected that this source of supply would tighten up. The decrease in private investor interest could serve as a further impediment to the normal process of economic recovery.

Existing transient lodging facilities could experience a downturn in their patronage due to the proposed cutbacks, particularly as a portion of this patronage consists directly of visiting families of base personnel.

Adverse effects on land use will relate to changing land values. Due to impacts on the housing market and regional income losses, some areas developed for residential and commercial use will decline considerably in value. These impacts will primarily occur on lands on the fringe areas of Blytheville currently in transition to residential use, existing residential areas in Gosnell, and commercial centers along major access highways. Land use plans and policies for the Blytheville-Gosnell Urban Area will have to be reassessed with new assumptions on growth parameters.

C. Wurtsmith AFB

On-Base Direct Employment Losses

The direct loss of 3,103 military and 550 (FTE) civilian personnel at Wurtsmith AFB would seriously impact the employment base of the Iosco County economy. This type of occurrence would be devastating to any small, non-diversified economy, and could be even more so to Iosco County, which depends on the inflow of federal dollars to support many jobs in other basic and non-basic employment sectors.

Disruption of Local Institutions

Local governmental units would be severely disrupted and future activities constrained due to losses in local population and accompanying losses in financial and labor resources for governmental functions. Many community services of local governments will lose valuable leadership and service provided by the base personnel and their dependents. The broad socioeconomic changes which the action will create will

alter past planning assumptions for all levels of government in the impact area. New goals and directions will be necessary, particularly for areawide economic recovery strategies.

Reduction of Local Economic Activity and Business Volumes

A closure of Wurtsmith AFB would reduce the population of Iosco County by almost 30 percent, resulting in reduced demands for retail goods and services, public utilities, housing and public services.

The closing of Wurtsmith AFB would also cause direct payroll losses and indirect losses of personal income.

Concurrent with the direct loss of base payroll would be a direct loss of base procurement awards; concurrent with the indirect loss of personal income would be an indirect loss of personal expenditures.

Deposits at local lending institutions would decrease with the losses of population and business.

A number of small and specialized businesses around Wurtsmith AFB could be severely impacted, if not put out of business, as a result of closure action. The direct loss of almost 30 percent of the county's population base would significantly affect retail sales within the county, resulting in some closings and underutilization of retail stores and centers.

Reduction of Public Revenues

The local school district would experience a decline in federal and state operating aid as a result of substantial enrollment decreases.

Public facilities and utilities that generate revenue through user charges would experience reduced revenues as a result of reduced population and demand. Reduced user charge revenues could jeopardize

payback schedules on revenue bonds used to finance construction of public facilities.

There could be some impact on Iosco County's annual allocation of federal revenue sharing funds due to reduced population levels and changes in per capita incomes.

Disruption of Public Service Patterns and Activity Systems

The utilization of certain public schools in the county would be significantly affected, possibly resulting in capacity underutilization in the short term.

If the base hospital is closed, there would be a measurable impact on the availability of medical services to military retirees in the county.

The various cooperative agreements between the base and surrounding jurisdictions for police and fire protection would cease to exist. This would place increased demands on the limited resources of these jurisdictions and could have adverse impacts on their fiscal capabilities and resources.

The primary adverse effects on transportation facilities will be an estimated loss of 25 percent of county funds for the maintenance and improvement of local roads. The frequency of rail service to the area may also be reduced.

Revenue losses to utility companies serving the impact area will be unavoidable. However, these losses are included in the regional analysis. Revenue losses will generally not result in higher rates to remaining customers, with the exception of losses to local water and sewer utilities. Loss of up to 1,013 households from the Oscoda/Au Sable area will require an estimated rate increase of 20 percent for water and sewer services in Oscoda Township, and up to 50 percent for water

services provided by Au Sable Township. Loss of 5 percent of the residential customers in Tawas City and about 4 percent of the residential customers in East Tawas could hasten the need for rate increases to remaining users in both these municipalities.

Disruption of Real Estate Markets and Land Use

The relocation of base-related households would further impact an already overbuilt and stagnated housing market.

In the short-term, the value of owner and renter housing could be expected to be depressed due to the weakening in demand resulting from base closure.

Over the short-term future, the generally depressed economic climate in Iosco County which would be caused by a base closure would probably discourage new private real estate development interest in the residential and commercial sector of the market.

Existing transient lodging facilities may experience a decrease in their patronage due to the proposed closure, particularly as a portion of tourism in the area consists directly of visiting families of servicemen.

Primary adverse impacts on land use will relate to changing land values in the impact area, primarily in Oscoda and Au Sable Townships. Due to impacts on the housing market and regional income losses, some lands developed for residential or commercial uses or in transition toward more intensive development will decline considerably in value. Turnover in land ownership of some residential and commercial properties may lower investments which will further decrease land values. Land use plans and policies will have to be reassessed with new assumptions about growth parameters in the impact area.

D. Available Mitigative Actions

Based upon the preceding analyses of potential adverse impacts anticipated at each base under study, five major impact categories have been identified. These impact categories include:

1. On-Base Employment Losses.
2. Reduction of Local Economic Activity and Business Volumes.
3. Reduction of Public Revenues.
4. Disruption of Public Service Patterns and Activity Systems.
5. Disruption of Real Estate Markets and Land Use.

A thorough review was undertaken of federal programs available to mitigate these adverse impacts. This was combined with reviews of case histories of communities that have suffered similar types of impacts from military base closings and documents published by and about the President's Economic Adjustment Committee (EAC) outlining courses of action available to impacted communities. A matrix was then developed which outlines basic, well-known programs available to mitigate the adverse impacts of base closings and assist in local economic recovery. In the matrix, the major and specific impacts identified are presented adjacent to the mitigation programs available.

Because of the similarity of the potential adverse actions at each of the bases, this matrix serves as a master matrix for each of the subject bases. With the exception of slight variations in available state and local mitigative programs, each program is applicable across-the-board. Although impacts may vary in magnitude, this matrix should serve as the source of all applicable mitigative programs presently available.

In addition to the comprehensive listing of mitigative measures shown in the matrix following, a number of programs of particular interest are discussed below.

The President's Economic Adjustment Committee

The President's Economic Adjustment Committee (EAC) has been charged with helping communities and individuals that may be affected by changes in Defense programs. Assistance is provided to help communities reduce their dependence on Defense activities and to make necessary adjustments when program changes cause serious impacts. The EAC is chaired by the Secretary of Defense and has members from all Cabinet departments (except State and Treasury) and six major federal agencies. The permanent management/administrative staff of the Committee is located within the Department of Defense's Office of Economic Adjustment.

The role of the Economic Adjustment Committee is to help a community help itself in making necessary adjustments. It does this by bringing a coordinated federal response that is in concert with the goals and objectives of community leaders. The intent of the economic adjustment program is to utilize state and local resources, in addition to federal resources, to create new private sector jobs and to reduce the community's dependence on Defense activities.

Since 1970, the EAC has assisted 136 communities in 40 states and Puerto Rico to diversify their local economy and reduce their dependence on Defense employment.

Prior to the establishment of the Committee in 1970, the program operated largely within the Department of Defense itself as the Defense Economic Adjustment Program. During its total fifteen year history, the Department of the Air Force has taken a particularly active and supportive role in the Economic Adjustment Program. With the closure of 38 air bases and stations during this period, resulting in the loss of approximately 39,000 Air Force civilian jobs, Air Force officials have aided the DOD Office of Economic

Adjustment and the impacted communities in the creation of approximately 41,900 civilian jobs on the former base facilities and about another 43,100 civilian jobs within the impacted area. Civilian airfields have been established at 25 of the former air bases and college or vocational training institutions have been created at 26 of the former facilities with approximately 25,300 students.

Because the activities of the EAC are tailored to the unique needs and resources of the affected communities and because the affected communities must request the assistance, the specific mitigation steps that might be taken cannot be identified at this point. But it should be noted that this mitigation opportunity does exist.

It should also be noted that if the EAC is asked for assistance, their response time should be shortened as a result of the analysis in the environmental evaluation process.

Employment (Placement)

Under the Department of Defense Program for Stability of Civilian Employment, every effort will be made to assist displaced employees obtain other acceptable employment.

All adversely affected career and career-conditional employees who desire placement assistance will be registered in a Defense-wide computerized Priority Placement Program. Registrants in this Program will be afforded priority placement rights to vacancies arising throughout the Department for which they are qualified and available. Also, the help of other Federal Departments and Agencies will be solicited and registrants in the Priority Placement Program will be made available for placement consideration in vacancies in these

organizations. In most cases, 60-day advance notice of reduction-in-force and functional transfer will be given to employees rather than the minimum 30-day notice required by the U.S. Civil Service Commission. Upon their request, employees will be carried in a leave status for such additional time as is necessary to provide a 90-day notice period prior to separation for reduction-in-force or for failure to accompany their function when it is moved outside the commuting area.

Defense officials work closely with the Civil Service Commission to seek out and provide job opportunities to affected employees. Eligible career employees desiring placement assistance will be registered in the Civil Service Commission's Displaced Employee Program for referral and consideration by other Federal Departments and Agencies.

Close liaison is maintained with the Department of Labor, State Employment Offices, and private industry to help employees desiring placement assistance or retraining for positions in the private sector.

Where displaced employees are required to relocate in order to continue their Federal employment, their transportation and moving expenses will be paid.

In those cases where employees suffer downgrading, their salaries will be protected to the maximum extent provided by law and regulation.

Employees selected for other job opportunities will be promptly released in accordance with their desires and those of the gaining employers.

Career employees who do not elect to take other Federal positions will be eligible either for severance pay up to one year, based upon length of Federal service, or for immediate retirement under one of the voluntary or involuntary retirement options.

The degree of success which can be achieved in relocating employees to other positions depends on a variety of factors, including employee mobility and the skill-mix of the work force affected. It is not possible, therefore, to predict the exact numbers of employees who will be placed in other positions. Past experience, however, with employees whose jobs are affected by major closures and consolidations indicates that the majority of employees desiring to continue in employment can be placed in other jobs.

Reports covering major closures and consolidations since the Department of Defense Stability of Employment Program was initiated in January 1964 indicate the following: (January 1964 through August 1975)

Placement in other jobs	145,283	(62%)
Retirements or Resignations	53,265	(23%)
Separations	<u>33,853</u>	(15%)
	232,401	(100%)

Employment (Separation Benefits)

A career employee who is separated by reduction-in-force in most circumstances is entitled by law to either an immediate retirement annuity or severance pay (but not both). The amount of his annuity or severance pay is determined by his age and length of service.

Employees meeting certain combinations of age and length of service can retire on immediate annuities without any reductions due to age. Other employees separated involuntarily are entitled to an immediate discontinued service annuity if they have 25 years of service (at any age), or if they have 20 years of service and are 50 years of age. Their annuities are reduced 2% for each year they are under age 55.

A career employee who is not eligible for an immediate annuity and is separated by reduction-in-force is generally entitled to severance pay, unless he is already drawing a government annuity from some other service, such as military service. The maximum severance pay allowance is one year's pay. Severance payments cease when an employee receiving them is reemployed by the Federal Government. Severance pay is based upon age and length of service. An employee receives one week's salary for each year of the first 10 years of service; two weeks' salary for each year of service after 10 years; and an age adjustment allowance of 10% of the total basic severance allowance for each year by which the employee's age exceeds 40.

Employees separated on an immediate annuity continue to receive their regular life insurance coverage (which equals their current salary, plus \$2,000) free of charge. The coverage continues at its present level until age 65 when it starts reducing at the rate of 2% a month until it reaches 25% of the original value. Employees who are not retiring on an immediate annuity have the option, within 31 days, to convert to another life insurance plan, without medical examination, for which they pay the full cost.

Most employees separated on an immediate annuity meet the eligibility requirements to continue in the same health insurance plan by which they were covered as active employees. In such cases, the Government continues to pay a portion of the costs (about 60%). Employees separated who are not eligible for an immediate annuity or who do not meet the minimum service requirements for continuation of their

health insurance program receive a 31-day temporary extension of coverage during which time they may convert to a non-group contract without evidence of insurability by the carrier of the plan in which they are enrolled. Employees converting to such plans pay the full cost.

Employees separated receive a lump sum payment for their accumulated annual leave. Unused leave generally may accumulate to a total of 30 days. For those who retire on an immediate annuity, the number of days of sick leave accumulated is credited toward the computation of their years of service for a retirement annuity. If an employee is physically incapacitated at the time of his proposed separation, his separation date is extended until he recovers or his sick leave is exhausted, whichever comes first.

If an employee is separated before attaining eligibility for an immediate annuity, he may elect to have his deductions refunded or leave the money in the retirement fund. If the money is left in the fund, and he has a minimum of 5 years of creditable service, he will be entitled to a deferred annuity at age 62.

Housing

While the short term increase in housing vacancy and potential reduction of demand would have an adverse impact, there is a mitigation step that can be taken to help offset the potential loss in resale value of vacated housing. The Department of Defense Home Owners Assistance Program provides that where an eligible applicant cannot sell his property privately and the Government purchases the property, the price paid by the Government is 90% of the prior value or the amount of the outstanding mortgages, whichever is higher, regardless of the current market value. In the case of a private sale, applicants are merely required to sell their property at its current fair market

value, as determined by comparable sales, and are reimbursed for the difference between 95% of the "prior" value and the net sale price.

Displaced Business Loans

This Small Business Administration program aims to assist small businesses which have experienced substantial economic injury as a result of displacement by, or location in or near a federally aided project.

Base Closing Economic Injury Loans

The objective of this Small Business Administration program is to assist small business concerns subject to economic injury as the result of closing by the Federal Government of a major military installation under the Department of Defense, or as the result of a severe reduction in the scope and size of operation of such an installation. Assistance is provided for continuing in business at an existing location, reestablishing a business, purchasing a new business, or establishing a new business.

Economic Development

The aim of this Economic Development Administration program is to solve problems of economic growth in EDA-designated geographic areas through project grants, feasibility studies, management and operation assistance, and other studies. Most technical assistance applicants are private nonprofit groups or municipal or county governments or entities thereof, located in economically depressed areas of the country.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>		
	<u>Federal</u>	<u>State</u>	<u>Local</u>
I. On-base Employment Losses			
	A. Military	1. Staged reductions by DOD. 2. Transfer by DOD. 3. New facility establishment by DOD.	
	B. Civilian	1. Staged reductions by DOD. 2. Priority Placement Program. 3. Retirements.	
II. Disruptions of Local Institutions			
A. Need for New Institutional Arrangements for Economic Recovery Strategies	1. Loan programs to attract industry into affected areas. 2. Foreign trade: Preferential availability of Export-Import Bank credits and other export assistance to business in affected areas.	1. State or local guarantee of private mortgage loans for incoming or expanding existing industry. (Development corporation, industrial parks, etc.) 2. Direct state loan programs to attract industry. Most effective if handled in conjunction with federal and/or local programs of this type.	1. More favorable tax assessment in affected areas for existing industry. 2. Special tax inducements and/or rates to attract new industry. 3. Setting up local development credit corporations to attract new industry and expand or retain existing industry in cooperation with private investors.

MATRIX OF MITIGATIVE PROGRAMS/ACTIONS THAT MIGHT BE
CONSIDERED FOR MEETING POTENTIAL UNAVOIDABLE ADVERSE IMPACTS

<u>Level of Programs and Nature of Mitigation</u>		
<u>Federal</u>	<u>State (with coordination at local level)</u>	<u>Banking and Financial</u>
3. Establishment of custom free foreign trade zones in affected cities to aid their attractions for international trade.	3. State-local contracts might be preferentially placed in affected areas.	1. Encourage local development through availability of credit on favorable terms.
4. Higher depreciation allowances and special tax credit for new investment in such areas.	4. Special state and local school building program and hospital construction program in area.	2. Setting up joint funds for the above purposes in order to spread risks in financing new ventures or for the conversion of existing firms.
5. Lower rate of corporate or individual income taxes in severely affected areas.	5. Special state tax inducements to attract new industry into affected areas.	

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>		
	<u>Federal</u>	<u>State</u>	<u>Local</u>
		<p>6. Construction of factories for new industry or leasing of existing factories. Industry either paying rent or lease-purchase arrangements on favorable terms.</p>	<p>3. Participation in the financing of local development corporations.</p> <p><u>Community (Chamber of Commerce and similar organizations)</u></p> <p>1. Publicity on locational advantages of areas.</p> <p>2. Planning for further development of area infrastructure, industrial and commercial development.</p> <p>3. Setting up of joint undertaking to attract new industry into area, possibly by participation in local privately financed development corporations.</p> <p>4. Setting up land buildings in industrial parks or estates for attracting industry.</p>
			<p><u>Affected Firms</u></p> <p>1. Greatest possible effort to continue local operations through switching over to nondefense business, either through the development of new products or shifting of operations from other areas where branch divisions are located.</p>

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>		
	<u>Federal</u>	<u>State</u>	<u>Local</u>
III. Reduction of Local Economic Activity and Business Volumes	A. Loss of Employment Sector		2. Encouragement of research to develop new nondefense products.
			<u>Labor Unions</u>
			1. Establishing a "favorable" labor image in affected areas, through moderation and constructive attitudes; must start before areas are affected.
			2. If necessary, moderating pay on other demands, and in some cases accepting pay cuts to keep plants in affected areas operating.
			3. Spread-the-work arrangements by a voluntary ban on overtime work.
		1. "Freeport" tax breaks.	1. Establishment of development commission or authority with revenue bonding authority.
		2. State industrial loans and guarantees.	2. SBIC's-EDA and SBA grants.
		3. State development credit corporations.	3. LIDC's-EAC grants.
			4. Local property tax breaks.
	1. EDA-Public Works and Economic Development Act of 1965 (PL 89-136).		
	- Technical assistance, demonstration grants		
	- Planning grants		
	- Public grants/loans, 50-80% of cost		
	- Private loans/guarantees, up to 65% of cost		

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

Community Impact	Level of Program and Nature of Mitigation		
	Federal	State	Local
B. Loss of Population, Payroll and Income	2. HUD-Community Development Block grants.		
	3. SBA-Section 502 loans.		
	4. Community development funds (Sections 105 and 107, "HDC Act," 1974).		
	1. Staged reductions by DOD. 2. New facility establishment by DOD.		Chamber of Commerce actions.
C. Loss of Personal Expenditures	SBA-Section 502 loans and base closing economic injury loans.		Securing private industry to generate greater levels of spending and local procurement.
D. Loss of Procurement Expenditures	Determined at national level.		Local procurement.
E. Retail Trade	Not significant unless job reductions are 15 percent of region employment base.		Realignment of retail centers and zoning constraints.
F. Base-related Services (small business)	SBA-displaced business loans (PL 93-237, Section 37(b)(7)) "base closing economic injury loans."		SBIC's to consolidate and distribute credit to small businesses.
G. Bank Deposits and Loans	1. FDIC and FSLIC (insurance only) 2. FIA and VA mortgage forbearance.		Bank mortgage forbearance.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

Community Impact	Level of Program and Nature of Mitigation		
	Federal	State	Local
H. Secondary Employment Reductions, AND			
I. Higher Un- and Underemployment	<p>1. Public Works and Economic Development Act of 1965 (PL 93,423) (PL 89-136); Title IX "Special economic Title IX "Special economic Title X "Anti-Recessionary job opportunities program."</p> <p>2. Manpower Development and Training Act of 1962 (Section 204(a) PL 87-415)</p> <p>- National on-the-job training. - Manpower revenue sharing.</p> <p>3. Vocational Education Amendments of 1968 (Title I, Part B PL 90-576).</p> <p>Flexibility of staging and timing of base closing.</p>	<p>1. Provision of job training and retraining facilities (DHR).</p> <p>2. University sponsored training programs and Vo-tech. education.</p>	<p>Local job training and adjustment, where applicable.</p>
J. Loss of Employed Base-Related Dependents	Not lost	Civilian only lost - not recoverable.	Not applicable.
IV. Reduction of Public Revenues (State and Local)			
A. Income Taxes	Not lost	Civilian only lost - not recoverable.	Not applicable.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>	
	<u>Federal</u>	<u>State</u> <u>Local</u>
B. Personal Property Taxes	1. DOD Homeowners Assistance Program.	Higher assessments or tax rates.
	2. GSA-release of excess property to community.	
C. Sales Taxes	Not significant (See III.A.)	
D. Gasoline Taxes	Not recoverable	
E. Utilities' User Charges (ability to pay back revenue bonds)	1. EPA cost recovery?	
	2. EDA and EPA-larger percent federal grants.	Higher user charges.
F. Revenue-Sharing Funds		Annexation, if possible and practical.
G. School System Funds for Children of Base Dependents	PL 81-874-90% of previous level for children of base residents for three succeeding fiscal years.	
V. Disruption of Public Service Patterns and Activity Systems		
A. Existing and Planned Utilities Improve-ments	1. EDA-Public Works and Economic Development Act (1965 PL 93-423) (PL 89-136) Title IX - Technical assistance, demonstration grants - Planning grants 2. EPA-PL 92-500 Title II	Increased state contribution. Industrial development bonds.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>	
	<u>Federal</u>	<u>State</u> <u>Local</u>
B. Educational Facilities Utilization	1. See III.G.(1).	Reuse via sales/lease of excess facilities for other public or private purposes.
	2. Vocational Education Amendments of 1968 (Title I, Part B, PL 90-576).	
	3. 100% discount on conveyance of base property to be reused for education (Section 203(k)(1)). Federal Property and Administrative Services Act of 1949.	
C. Loss of Health and Medical Facilities	100% discount on conveyance of base property for reuse of hospital/medical facility - Federal Property and Administrative Services Act of 1949 (Section 203(k)).	Acquisition of base facilities through revenue bonds, if necessary, or grants, if applicable.
D. Loss of Air Service Infrastructure	1. FAA-100% discount on conveyance of base property for general aviation reuse (Section 13, Surplus Property Act of 1944).	Acquisition of base facilities through revenue bonds, if necessary, or grants, if available.
E. Loss of Public Recreation Facilities	2. Same as V.C.(1). 50% discount on conveyance of base property to be reused for parks and recreation - DOI - Surplus Property Act of 1944, Section 13(h).	
F. Transportation	1. Federal highway programs. Speed up of expenditures in affected areas.	1. Special state and local road building and maintenance program in affected areas.

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

Community Impact	Level of Program and Nature of Mitigation		
	Federal	State	Local
VI. Disruption of Real Estate Markets and Land Use			
A. Increased Vacancy in Housing Market and Loss of Market Value			<ol style="list-style-type: none"> 1. Bank mortgage forbearance. 2. Building moratoria. 3. Purchase of base housing for public housing - HUD monies via "National Housing Act" 1968 PL 90-448, Section 235(j) "U.S. Housing Act of 1937" PL 75-412 (Local housing authority)
B. Reduction of Retail Sales	See IV.A.		
C. Reduced Motel Occupancies	EDA planning grants to evaluate and promote viable tourism or lodging-related industries.		
D. Reduced Private Investor Interest	<ol style="list-style-type: none"> 1. EDA-loans and guarantees to aid businesses to establish where other lenders won't venture (PL 89-136) P.W. and Economic Development Act of 1965. 	<ol style="list-style-type: none"> 1. "Freeport" tax incentives. 2. State loan guarantees. 3. State development credit corporation. 	<ol style="list-style-type: none"> 1. Local industrial development bonds 2. "Special" tax bonds on new development. 3. SBIC's.
	<ol style="list-style-type: none"> 2. Airport construction in affected areas. 3. Increase in subsidies to airline serving affected areas. 		
	<ol style="list-style-type: none"> 1. DOD Homeowners Assistance Program insures at least 90% of market value. 2. DOD-protection and maintenance contracts. 3. Staged reductions of base employment. 4. HUD funding for public housing. 		

MATRIX OF AVAILABLE MITIGATIVE PROGRAMS/ACTIONS RELATED TO
POTENTIAL UNAVOIDABLE ADVERSE IMPACTS (cont.)

<u>Community Impact</u>	<u>Level of Program and Nature of Mitigation</u>	
	<u>Federal</u>	<u>State</u> <u>Local</u>
E. Declining Land Values	2. Same source - public development grants.	
	1. Special rehabilitation and home modernization programs in affected areas to assist building industry. (Example: Declaring area equivalent to urban renewal area, making available low cost long-term mortgages for rehabilitation.)	<u>Banking and Financial</u>
	2. Subsidies to cushion losses on selling owner-occupied homes for families having to relocate.	1. Leniency in respect to home mortgage loans and mortgage loans on individual and commercial real estate.
	3. Stepped-up urban renewal expenditures, with special consideration given to the needs of affected areas.	2. Leniency in treatment of business borrowers losing defense contracts or of personal borrowers affected by cutbacks.
	4. Preference for constructing federal buildings in affected areas.	
	5. Stepped-up public housing programs, particularly for aged, both nationally and/or with special consideration for affected areas.	

Chapter VI. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF MAN'S
ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF
LONG-TERM PRODUCTIVITY

This chapter contains a concise discussion of the extent to which the proposed action involves trade-offs between short-term environmental gains/losses and the expense of long-term gains/losses; and the extent to which the proposed action forecloses future options.

A. Kincheloe Air Force Base Area

There are potential conditions that might exist as a result of the candidate action that would be detrimental in the short run, but which could prove advantageous in the long run. As a result of the proposed candidate action it is likely that there would be a severe short-term decline in economic activities in the Kincheloe AFB area. There will be a localized reduction in employment, tax revenues, use of local schools and other publicly owned and run facilities and services, along with a high housing vacancy rate and corresponding decline in market values. When considered against a background where the economy exhibits a severe and persistent unemployment rate, an erosion of the already small industrial base of a fragile, undiversified economy, and an out-migration of population, the closure of Kincheloe AFB would exacerbate economic conditions and diminish the long-term productive potentials of the region. The term over which the severe exacerbative effects would be felt will be determined primarily by the success of mitigative actions and economic recovery plans for the area.

Among those conditions to be considered in the long run are the following:

Reduced revenues and demands on public facilities, resulting in excess capacity, could prove advantageous in attracting a major new industry or industrial park developer.

The loss of jobs and reduction in the area's total personal income would probably severely depress the local economy in the short term, but a large available skilled labor pool may prove advantageous in attracting new industry and economic generators over the long term; and these new employers could be much more stable and less subject to cutbacks than the base may prove to be.

The loss of the base facilities and activities may create many short-term difficulties; but the imminent availability of the land itself would provide many opportunities for construction or development of much-needed or long-sought community facilities.

High housing vacancy rates and low market values would create difficulties in the short term for civilians in the local area trying to sell their homes; but in the long term these factors may contribute to a healthier housing market. Existing substandard housing would probably be demolished when no buyers could be found, reducing vacancy rates and raising market values in the long run. In addition, if effective mitigating measures are adopted and the local area gets economic impetus from new industries or other sources, housing would be available for in-migrating households.

The candidate action does not foreclose future options for the land use of the base or surrounding areas.

B. Blytheville Air Force Base Area

If the proposed alternative action at Blytheville AFB were implemented, the relationships which would exist in the Primary Impact Area of Blytheville are essentially the same as those which would be experienced in the Kincheloe AFB Primary Impact Area. However, as the existing economic and population base of Mississippi County is more diverse and larger it is likely that the severe impacts anticipated over the

short-term period would be mitigated or resolved over a shorter time period than in either of the other two base areas considered.

C. Wurtsmith Air Force Base Area

The relationship between short-term use of the environment and the maintenance of long-term productivity in the Wurtsmith AFB Primary Impact Area parallel those discussed above for Kincheloe AFB. For an enumeration of these considerations, refer to the preceding discussion in paragraph A above.

Chapter VII. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Kincheloe AFB

If the proposed closure of Kincheloe AFB takes place, certain expenditures of capital, materials, manpower and time which have been made or committed may be irretrievable. Such irreversible and irretrievable expenditures of resources which occurred while Kincheloe AFB was in operation and which represent resources ineffectively utilized or lost to local governments and citizens of the impact region are highlighted below.

Capital investments by the local government for support services and facilities related to the base presence would become underutilized.

On the basis of preliminary data there appear to be no resources pertaining directly to governmental institutions, transportation, civilian community utilities, or land use which would be irreversibly committed to any purpose should Kincheloe AFB be selected for closure.

A loss in personal and business income and in investment would result from the proposed action at Kincheloe AFB as businesses are forced to close.

Those services developed specifically in response to the military presence in the region would be lost through closure or transfer.

Blytheville AFB

The irreversible and irretrievable commitments of resources associated with the alternative closure of Blytheville AFB would be similar in nature to those experienced at Kincheloe AFB and therefore will not be discussed separately. Refer to the Kincheloe AFB narrative above.

Wurtsmith AFB

The irreversible and irretrievable commitments of resources associated with the alternative closure of Wurtsmith AFB would be similar in nature to those experienced at Kincheloe AFB and therefore will not be discussed separately. Refer to the Kincheloe narrative above.

CHAPTER VIII. CONSIDERATIONS THAT OFFSET THE ADVERSE ENVIRONMENTAL EFFECTS

A. INTRODUCTION

Both Congress and the public expect the Air Force to manage its resources in as efficient a manner as possible consistent with its ultimate mission of protecting and defending the United States. This includes taking action that may have short-term adverse effects on communities but without which strong national defense could not be assured. Neither the Air Force nor the Department of Defense is authorized or appropriated funds to guarantee employment or activity levels to support a particular community. However, cognizant of its responsibility, the Air Force, in conjunction with the Office of Economic Adjustment, would assist any affected community -- as indicated in Chapter V.

In less than 10 years the number of aircraft in the Air Force inventory has been reduced 35 percent, the combat squadrons have gone down 42 percent, manpower has decreased 33 percent (including a 62,000 reduction between the end of Fiscal Year 1975 and the end of Fiscal Year 1977), flying hours have decreased over 50 percent while fuel costs have almost tripled. During this same period the Air Force has reduced the number of major installations by over 30 percent to respond to this shrinking force and its reduced requirements. The installation reductions have totaled almost \$1.0 billion in annual operating costs that the Air Force has avoided. The dollar savings, realized annually, represent a substantial contribution to Air Force combat capability. The objective of the proposed action, as related to Kincheloe AFB, is to further the goal of strengthening the combat forces within budget restraints. Consequently, the concept and magnitude of cost avoidance as shown in the following table is a major factor that a decision maker must consider as offsetting the adverse impact that would result within the affected communities.

Table VIII-1. RESOURCE COMPARISON, AIR FORCE
COST/COST AVOIDANCE

(\$000)

<u>Proposed Action</u>	<u>Ultimate Annual</u>	<u>One-Time Costs</u>	<u>One-Time</u>
	<u>Recurring Cost</u> <u>Avoidance</u>		<u>Cost Avoidance</u>
Primary Candidate (KAFB)	\$28,292	\$16,148	\$ 9,274
Alternate #1 (WAFB)	\$28,095	\$15,166	\$13,061
Alternate #2 (BAFB)	\$24,186	\$12,570	\$ 6,867

Note: In current 1976 dollars.

Source: Operations and Resources Evaluation, Base
Realignment Proposal, Kincheloe AFB

B. RELATED ANNUAL RECURRING COST AVOIDANCE, ONE-TIME COST AND COST
AVOIDANCE ESTIMATES

The information contained in the above tables was extracted from a detailed cost estimate on the impact to the USAF and DOD resources. A summary of the methodology used in the resource study is contained in the following paragraphs.

1. Annual Recurring Cost Avoidance

This estimate was derived by adding the amount saved resulting from reduced manpower requirements to the savings achieved via reduction of operations and maintenance costs which are presently expended in maintaining each respective base in an operational status. Associated increases to operations and maintenance costs at units gaining aircraft and related manpower authorizations have been offset against these savings. Estimated increases in CHAMPUS costs at each location have likewise been included as an offsetting cost. The resultant net annual cost avoidance represents the ultimate annual DOD savings to be achieved in Fiscal Year 1980 after all transfer and reduction actions have been completed.

2. One-Time costs

Weighed against the recurring savings shown above are the one-time costs of relocation. These consist of transportation costs for material and equipment, movement allowances for personnel, severance pay for civilians who are separating from their jobs, and an estimate of Homeowners Assistance Program costs. Contract termination penalties and other miscellaneous penalty payments have also been included. One-time costs for construction deficiencies at locations gaining aircraft and personnel have likewise been identified and included.

3. One-Time Cost Avoidance

Cancellation of planned and funded construction at each location have been identified and a cost estimate included. This figure includes both Appropriated and Non-Appropriated Fund construction requirements. It should be noted that not all projects have been approved and/or funded. To the extent approved and funded, these funds would be available for other USAF projects.

4. General Accounting Office Involvement

The General Accounting Office has been involved in a detailed audit of the Air Force's Proposed Action at Kincheloe AFB. The Air Force believes, as a result of contact with the GAO representatives during this detailed examination, that the GAO will substantiate the cost effectiveness of the Proposed Action as indicated above.

5. Cost to Other Agencies

In response to issues raised at the public hearings, the Air Force attempted to determine the impact of the proposed action on programs administered by other agencies. Specifically, the Departments of Agriculture, Commerce, Health, Education and Welfare, Housing and Urban Development and Labor and the Small Business and Veterans Administrations and the Corps of Engineers were requested to estimate the impact on programs

under their jurisdiction. The following is a summary of their responses:

a. Department of Agriculture

The Department of Agriculture advises the impact on the Food Stamp or Child Nutrition Programs as a result of the proposed closure or alternative actions would be negligible.

The Farm Home Loan Program is administered by the Farmers Home Administration under Section 502 of the Housing Act of 1949. It is a non-competitive lending agency which serves families that are unable to qualify for home loans through any other lending agency. Residents of communities with populations of 20,000 or less may qualify under the current program.

Numbers of home loans and outstanding mortgage indebtedness in the Air Force base impact areas are as follows:

<u>County</u>	<u>Number Home Loans</u>	<u>Outstanding Balance as of 1 October 1976</u>
Chippewa MI (Kincheloe AFB)	175	\$3,656,000
Iosco MI (Wurtsmith AFB)	240	4,574,000
	50 Unit rental apt.	700,000
Mississippi AR (Blytheville AFB)	822	9,229,660

Data on original loan value of current mortgages, average age of the mortgages or extent of involvement in this program by base employees is not readily available. Therefore, no quantitative estimate is attempted here as to probable default rate or ultimate loss to the Farmers Home Administration from such defaults resulting from base closure.

b. Department of Commerce

The Economic Development Administration provided the following information regarding its Title IX Program (Public Works and Economic Development Act of 1964 as amended, 1974):

Two types of assistance are available under Title IX to assist communities in adjusting to economic dislocation: development grants and implementation grants. The size of development grants vary depending upon such factors as the size of the area impacted and number of people affected. The average size of DoD related development grants in FY 1975 was \$85,400 and in FY 1976, \$62,600 (average of seven and five grants, respectively).

An accurate estimate of the amount of implementation grant which might be provided cannot be made, since it is entirely contingent upon the economic adjustment strategy submitted. The average size of four DoD related implementation grants in FY 1975 was \$3,645,000 and the average of three grants in FY 1976 was \$4,539,000.

c. Department of Defense Homeowners Assistance Program

This program is administered by the U.S. Army Office of the Chief of Engineers who provided the following estimates of possible costs incurred by that agency.

<u>Type of Payments</u>	<u>Kincheloe</u>	<u>Blytheville</u>	<u>Wurtsmith</u>
Government Purchase	\$2,500,000	\$2,500,000	\$2,500,000
Private Sale Reimbursement	<u>500,000</u>	<u>1,000,000</u>	<u>500,000</u>
TOTAL	\$3,000,000	\$3,500,000	\$3,000,000

The above cost estimates are incorporated within the One-Time Costs depicted in Table VIII-1.

d. Department of Health Education and Welfare (HEW)

Federal payments under the provisions of Public Law 81-874 as amended by the education amendments of 1974 (PL 93-380) are presented below as costs to HEW. It is assumed that the Public Law will be extended for a three year period on or before its expiration date of June 30, 1978. These estimates represent total Federal costs of impact aid to local school districts following Air Force base closure. These costs would not be considered net added costs to HEW except to the extent that dependents of military and civilian employees would transfer their impact aid entitlements to other school districts during the three-year period of diminishing aid at the closing base location. As a worst case estimate, it cannot be assumed that all entitlements would be transferable because about 43% of the military personnel losses at each base would represent net reductions to total Air Force personnel strength. No attempt is made here to estimate to what extent other military and civilian employee entitlements would be transferable due to the many variables to be considered.

<u>Impact Area</u>	<u>PL 81-874 Costs Following Base Closure</u>			<u>Total</u>
	<u>1st year</u>	<u>2nd year</u>	<u>3rd year</u>	
Kincheloe AFB	\$750,740	\$675,660	\$608,090	\$2,034,490
Blytheville AFB	482,340	434,100	390,690	1,307,130
Wurtsmith AFB	812,460	731,210	658,090	2,201,760

e. Department of Housing and Urban Development (HUD)

Data on FHA insured mortgages were obtained by letters dated November 11, 1976 and November 17, 1976 from the HUD Region V and Detroit Area offices respectively. Additional information was obtained subsequently by telephone from Region V, the Little Rock, Arkansas Area Office and the Management Information Systems Division in Washington, D.C.

The following information was obtained:

<u>County</u>	<u>Number FHA Insured Family Units</u>	<u>Outstanding Balance as of June 1976</u>
Chippewa MI (Kincheloe AFB)	116	\$1,390,450
Iosco MI (Wurtsmith AFB)	113	1,419,050
Mississippi AR (single family)	1736	22,834,900
(Blytheville AFB) (multi unit)	212	2,550,800

Without an in-depth study no information is available on the original loan value of the current mortgages, the average age of the mortgages or how many of the mortgagors are base personnel. Therefore, no quantitative estimate is attempted here as to probable default rate or ultimate loss to HUD from such defaults resulting from base closure.

f. Department of Labor

Potential Federal cost for unemployment benefits to federal civilian employees has been presented in Chapter III on a worst case basis. The dollar amounts indicated assume all civilians directly unemployed would receive the maximum rate of compensation per week for the maximum number of weeks.

Additional information was obtained from the Department of Labor which may permit a more refined estimate of this potential impact. Average FY 76 figures for duration of unemployment and weekly rates were obtained by states for both Federal and non-Federal employees. These averages were applied to both direct unemployment (assuming 62% of DAF leaving the area) and indirect unemployment. Administrative costs were also computed. Based on these assumptions, Federal and State costs were computed as follows:

BASE	FEDERAL COST			State Program*
	Estimated Compensation	Estimated Administrative Costs	TOTAL	Cost Estimated Compensation
Kincheloe	\$551,100	\$140,860	\$691,960	\$1,345,380
Blytheville	385,080	118,850	503,930	1,191,490
Wurtsmith	541,440	193,100	734,540	2,065,930

*Assumes all indirect unemployed eligible for State Unemployment Compensation. These costs could temporarily become Federal costs in the event State funds became exhausted necessitating Federal interest-free loans to the State.

g. Small Business Administration (SBA)

The potential impact on small businesses at any of the three locations would be significant, making a number of businesses eligible for Base Closing Economic Injury Loans under Section 7(b)(7) of the Small Business Act, as amended. Using data on military and civilian job losses, impact area population and base payroll as presented in the Draft EIS, volumes of SBA loans were estimated as follows:

<u>Impact Area</u>	<u>Estimated Range of New SBA Loan Volumes</u>
Kincheloe AFB	\$2.3 million to \$2.7 million
Blytheville AFB	1.9 million to 2.4 million
Wurtsmith AFB	2.3 million to 2.8 million

h. Veterans Administration (VA)

VA loan activity in both the Kincheloe AFB and Wurtsmith AFB areas is said to be very limited. Hence the effect on the VA Loan Guaranty Program at either location would be minimal.

In the Blytheville AFB area, VA has 964 guaranteed loans in the impact area (Mississippi County) accounting for approximately 5% of the civilian housing units in the county. No estimates were made of the extent of base personnel involvement in such loans. It was not considered possible to predict the probable default rate among indirectly affected employees.

i. The President's Economic Adjustment Committee (EAC)

Aid programs sponsored by the EAC and coordinated by DOD's Office of Economic Adjustment may include additional costs to the above federal agencies as well as costs to other Cabinet departments and agencies that are members of the EAC. These costs may be in the form of grants, loans and loan guarantees. A review of recent EAC-sponsored projects indicates that the Small Business Administration and the Department of Commerce's Economic Development Administration have participated

in about 75% of the projects: HUD, HEW, Labor, Interior, Transportation and GSA participated in about 50% of the projects. A summary of EAC funding at eleven communities involving major DOD installation closures follows:

Summary of EAC Funding
Eleven DOD Installation Closures,
(1973 through 1976)

Purpose	Project Financing (000)		
	Minimum	Maximum	Average
Organization & Staffing	\$ 0	\$ 153	\$ 52.9
Planning	0	1,118	364.8
Manpower	0	3,000	618.1
Business Development	0	14,702	1,454.6
Capital Improvements	0	25,059	5,503.3

It is evident from the above cost data that assistance under the EAC is highly variable, being tailored to individual community circumstances. An accurate prediction of such costs applicable to these candidate or alternative closures is not considered feasible.

CHAPTER IX. DETAILS OF UNRESOLVED ISSUES

The issue of the disposition of the base properties for uses other than military remains unresolved.

Another issue which remains unresolved is the quantification of some of the secondary impacts resulting from the proposed closure of the candidate or alternative bases. The Air Force recognizes that the closure of any major installation will have significant adverse secondary impacts on socioeconomic conditions in the surrounding area. The Air Force also recognizes the desirability of making as accurate a prediction of these impacts on the various aspects of the socioeconomic environment as possible. In many instances, these secondary impacts can only be estimated by means of statistical prediction of the behavior of people, i.e., how many will leave an area to seek employment elsewhere, how many will retire, mitigative actions taken, etc. By their nature, these predictions are not precise, and equally competent statisticians and analysts will arrive at differing conclusions.

CHAPTER X. BIBLIOGRAPHY

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PART II. AIR FORCE ANSWERS TO QUESTIONS
IN APPENDICES A, B AND C

- PREFACE

This section contains Air Force responses to questions included in written comments and/or from informal public hearings on the Draft Environmental Impact Statement. These comments are contained in Appendices A, B and C for Kincheloe AFB, Blytheville AFB, and Wurtsmith AFB, respectively.

Many of the questions expressed at the public hearings were answered by Air Force representatives in attendance and the response appears immediately following the question in the hearing transcript. Questions considered to be rhetorical are not addressed. The remaining questions were bracketed and annotated in the margin with an identifier which includes the first letter of the applicable base's name. All questions annotated in this manner have been answered in this section either directly or by referring to the page of the FEIS and the Air Force Environmental Reference Number (AFERN) or subheading where it is discussed. The page in the Appendix where the question is found is shown under the question identification number.

ANSWERS TO QUESTIONS IDENTIFIED IN APPENDIX A

- A-1K The items mentioned comprise adverse impacts of base closure on
p22 the local economy and they have been acknowledged throughout Chapter III. See AFERN 4.2.3, page 90; AFERN 4.2.5, page 95; AFERN 4.3.5, page 103; and AFERN 4.2.2, page 84. While these impacts have been acknowledged, they cannot be predicted in quantifiable terms because of the complex factors involved.
- A-2K Noted. It is beyond the intended limits of this report to deal
p22 with questions relating to the state by state expenditure of federal tax dollars. It is understood that there will be economic hardships if Kincheloe is closed, however, what effect this action will have on communities to the south and west is impossible to estimate. See AFERN 4.2.3, page 90 for a discussion of the impact of base closure on public expenditures and revenues.
- A-3K Unquestionably, teachers and others in the community that lose
p72 their jobs as a result of base closure will be subject to financial hardship and the stresses attendant in trying to find replacement jobs. To some extent, unemployment compensation will soften their financial loss but those unable to find other jobs in the area may eventually be forced to move elsewhere in search of employment opportunities.
- A-4K As stated in the Kincheloe Operational and Resources Evaluation
p84 Document, Reference No. 9 in Chapter X, Bibliography, the beddown location of strategic bomber and tanker forces has been delicately balanced to meet both the primary emergency war order mission and day to day training, which includes lateral command aerial refueling training. As stated, the reduction or closure of any SAC main operating base would adversely affect flexibility, survivability, and effectiveness of assigned resources. However, the Air Force has been directed to reduce base operating support costs; therefore,

the candidate action permits the Air Force to accomplish its given mission with the least degradation in capability while still achieving the directed savings.

A-5K Although the strategic value of Kincheloe AFB cannot be disputed,
p132 the Air Force and the Strategic Air Command have determined that it will not significantly detract from the defensive posture of the United States to close Kincheloe. This determination was based on a thorough examination of our strategic capability which confirmed that a strong defensive posture could be maintained should Kincheloe AFB be closed.

A-6K The purpose of the public hearing was to provide local individ-
p133 uals/groups a chance to receive and provide information on the proposed action and to ask any questions regarding the issues. Accordingly, it offered the Air Force an opportunity to clarify points that may have been misunderstood. The meeting also permitted the Air Force to receive representative samples of public opinion on the proposed action. All comments, either verbal or written, were recorded and constitute an integral part of the final environmental impact statement. All of the information gathered at the hearing will be used by the decision-makers as one of many factors to be considered in making a final decision.

A-7K The decision-makers will receive the complete FEIS, including the
p133 verbatim public hearing transcripts, in addition to all related background studies. The Secretary of the Air Force will consider this detailed information during his review in order to ensure that all matters are considered when formulating his decision.

A-8K Base-related military employment is considered at only one point
p134 in the study. This is when its contribution to the total employment base of Chippewa County is examined. In all other instances, however, the civilian labor force is taken as the frame of

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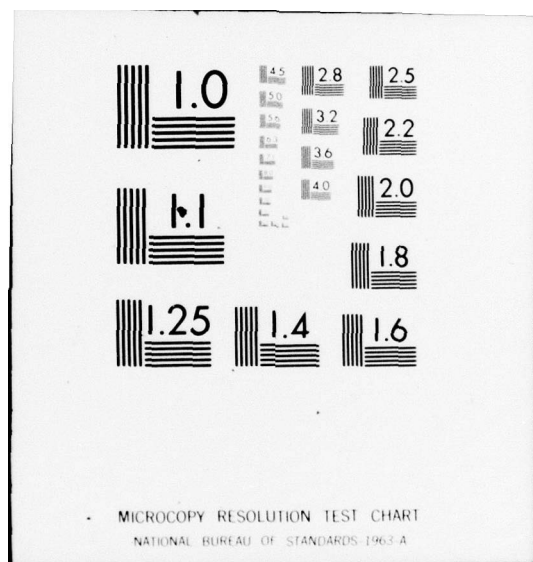
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reference. This serves as the baseline against which all unemployment and resultant unemployment figures are compared. For a more detailed discussion, see Chapter III, AFERN 4.2.2., page 87.

A-9K Bases that currently have two or more primary missions operating
p138 from that installation are considered multimission. There has not been the drawdown in other commands' aircraft or missions that there has been in the Strategic Air Command over the last few years. By closing a multimission base, excessive military construction funds would be required to relocate existing missions, therefore significantly diluting the potential savings. Maximum savings can only be realized by closure or reduction of those installations supporting a single-mission base.

A-10K Medical care, except for dental services, is available for re-
p138 tirees through CHAMPUS. The only dental care authorized under CHAMPUS is that done as an adjunct to medical care. Individual civilian physicians may or may not elect to participate in CHAMPUS. If individual physicians do not desire to participate, the patient may file with CHAMPUS for reimbursement on his own. However, any difference between CHAMPUS allowable charges and the physician's charges must be borne by the individual as it is in any other location throughout the United States. Medical care in a military hospital is not, and has not been, guaranteed to retired servicemen and their dependents. There is no difference between the geographic location of Kincheloe and any other location where a military installation is present with respect to retirees. Chapter 55, Title 10, United States Code, the Statutory Authority for Providing Care in Uniformed Services Medical Facilities, states that care for retired military and their family members is subject to the availability of space, facilities, and the capabilities of the medical and dental staff.

A-11K At this time we cannot predict the last possible date a decision
p139 could be made on the Kincheloe candidate action. A variety of
factors contribute to this uncertainty, including the possibility
of additional procedural reviews by incoming elected and appointed
officials of the new administration.

A-12K If the B-1 is built, Kincheloe AFB would be capable of supporting
p139 a B-1 mission from a viewpoint of existing runways, taxiways and
parking apron. There are also many other installations that are
capable of supporting the B-1 with less total construction re-
quirements.

A-13K We are not limited to current capabilities in the decision process.
p140 Prior to nominating the candidate actions, the Air Force fully
assessed its future basing requirements. After doing so, we are
confident we can satisfy known requirements, including those gen-
erated by the B-1, if the candidate or an alternative action is
implemented.

A-14K The Final Environmental Impact Statement has been filed with the
p141 Council on Environmental Quality and a Decision is expected some-
time in February 1977. The decision will be announced as quickly
as possible after being reached. There is no minimum or maximum
time period between filing the final statement and making and an-
nouncing a decision. However, PL 91-190 and Section 612 of
PL 94-431 do specify minimum time periods that must be met before
the proposed action could be fully implemented.

A-15K Refer to response to 14K above.
p141

A-16K Item One: There is no listing of an achievement ranking for all
p157 military bases. Such diverse factors as missions, facilities,
geographic location, equipment, etc., preclude development of a
common basis of comparison. Any such listing would be highly

subjective and of limited utility.

Item Two: Air conditioning costs are aggregated with overall cost for utilities such as electricity or gas. A comparison of eleven bases would not contribute to our deliberations. Air conditioning costs, if they were tracked, would be lower at Kincheloe than any of our southern bases.

Item Three: The location of SAC's bomber and tanker forces has been delicately balanced to meet the primary emergency war order mission as well as day-to-day training, which includes lateral command aerial refueling training. A cost analysis that assumed the closure of Blytheville and the use of Kincheloe KC 135 aircraft to support the lateral command air refueling missions that Blytheville normally supports, indicates an additional 708,923 gallons of fuel would be expended by the Air Force. The overall annual increase in dollars expended would be \$525,740. SAC as the single manager of all Air Force tanker aircraft would not operate in such an uneconomical manner. If Blytheville AFB were closed, the air refueling mission it presently supports would be reallocated to other tanker units in the same geographical region and thereby offset this increase in fuel requirements and the associated cost. Personnel from Headquarters SAC, Directorate of Combat Operations, recently presented a classified briefing (Secret) to two of Senator Griffin's administrative assistants concerning the employment of strategic forces should Kincheloe AFB be closed. The questions concerning "over the pole" refuelings would require a classified (Secret) answer. We can assure you that all aspects of our primary mission were considered and will not be significantly affected.

Item Four: A determination of the economic impact of closing eight other bases for comparison to the impact of Kincheloe would be meaningful only if the other bases were considered alternatives. Since the economic impact of the suitable alternatives has been documented in the EIS, socioeconomic impact studies of other

locations are not required and would be superfluous to this study.

Item 5: The Air Force has not collected the dollar value, number of fatalities and/or injuries and cost per man hour expended due to natural disasters at all military installations. We are aware that the time lost due to natural disasters at Kincheloe is minimal and will consider that factor in the decision making process.

A-17K The light aircraft traffic does not represent a flight safety pE-116 problem. The comment is made as a general statement of fact.

A-18K The March 11, 1976 public announcement, concerning fiscal years 76 pE-137 and 77 base closures and realignments, contained many items other than the proposed closure of Kincheloe AFB MI and the reduction of Loring AFB ME to a forward operating base status. Other major proposed closures/realignments were closure of two Air Training Command bases, Webb AFB TX and Craig AFB AL, and a major reduction at Richards-Gebaur AFB MO.

The description of proposed actions and alternatives contained in the Kincheloe and Loring Draft Environmental Impact Statements only discuss the proposed actions affecting the Strategic Air Command. Air Training Command (ATC) and the Air Force Communications Service (AFCS) have also prepared descriptions of proposed actions and alternatives on those actions affecting their bases.

The Air Force continually evaluates all bases and installations. What Secretary Reed announced for further study on 11 March 1976 were those bases and alternatives recommended by the HQ USAF staff.

A-19K The impacts on the housing market will be severe; see Chapter III pL-9 AFERN 4.2.5, page 95 for a complete discussion.

A-20K The loss in land values is clearly acknowledged; however, it is
pL-9 not possible to predict the exact dollar amounts or percentage
changes. See Chapter II, page 73.

A-21K According to college officials, the impact of base closure would
pL-10 be modest. The on-base course offerings, which constitute an
important portion of the college's part-time program, would of
course be terminated. There would be some attendant revenue de-
cline but since base facilities are used for the on-base program
and the courses are taught by some faculty members on an "over-
load" basis and by other part-time instructors, termination of
on-base programs would not affect campus facilities, curriculum
or staff.

Despite several efforts to do so, college officials have been
unable to determine the number of base personnel and dependents
participating in on-campus programs; as a rough approximation, they
may amount to 100. While departure of these base personnel and
their dependents may temporarily affect enrollment, their small
numbers distributed throughout a wide array of courses will not
affect curriculum, faculty or facilities utilization. Given past
and projected rates of enrollment increases, base personnel and
their dependents would be replaced eventually by other new stu-
dents. As a state-supported institution, college officials antici-
pate no adverse impact on tuition levels due to base closure.

A-22K Kincheloe AFB was not a candidate for closure during 1975, there-
pL-11 fore, needed improvements were made. To have not made these
improvements would have presupposed a decision would be made to
close the base. A decision has not been made to close Kincheloe
AFB or the alternative bases, Wurtsmith and Blytheville.

ANSWERS TO QUESTIONS IDENTIFIED IN APPENDIX B

A-1B The general policy of the Air Force is to inactivate installations
p150 on the date that the installation's mission terminates. This decision is made on the highest policy-making levels and the Armed Services Committees of Congress are informed of the disposal actions prior to implementation. To date we have not received a mission termination decision. Based upon past experience in the Declaration of Excess for McCoy AFB, the following actions were taken within the specified time frame. HQ USAF sent a message on April 18, 1973 advising Headquarters SAC that the Air Force mission at McCoy AFB would be relocated or inactivated by September of 1973, except for the relocation of one unit that would remain until the summer of 1974. Therefore, it is anticipated that a similar time frame will be established for this installation with six to nine months lead time. The Air Force continues to be responsible for accountability, custody and maintenance of the excess real property, and related personal property until disposal is completed by General Services Administration.

A-2B When the decision is made to inactivate an installation, the
p151 mission and associated units will either be transferred or inactivated by the end of the effective fiscal quarter in which an action is programmed except for a residual caretaker force of approximately 320 personnel. This caretaker force will remain and provide care and custody of the installation until GSA can dispose of the real and associated personal property. For planning purposes a six to nine month time frame would be required to go from a full active base to caretaker status. The time required from caretaker status to final disposition cannot be determined at this time.

A-3B Once a decision to inactivate and to dispose of an installation is
p151 made, preparation of a Declaration of Excess at base level is

directed to be submitted through command channels, identifying such Air Force or other DOD retention requirements as may be involved. If there is no DOD requirement for the real or associated personal property, the disposal action would continue once the inactivation of the mission is announced. Refer to Answer 2B for further explanation.

A-4B The filing dates for the Kincheloe and Loring FEISs with the CEQ
p152 have been revised to early February 1977 and late May 1977, respectively. The decision dates for each action will follow sometime after the FEISs are filed.

A-5B Once a decision is made, and implemented, to close/reduce a base
p153 as a result of this study/evaluation, that ends the environmental process. Those bases not selected from the final list of candidates (primary or alternates) are dropped from further consideration. If and when future realignment actions must be considered, another full scale evaluation will be initiated based upon the strategic posture (bomber and tanker) existing at that time. The fact that a particular base was included in this evaluation as an alternate (or primary for that matter) will not, in itself, make it more vulnerable during any future study. Its vulnerability will be based upon how it fits into the selection criteria that are used as part of the evaluation process. Past vulnerability, per se, will not be part of that selection process.

A-6B As stated in the answer to question 5B, once the environmental
p153 study has been completed and a decision is made and implemented to close/reduce a base, that ends the environmental process.

ANSWERS TO QUESTIONS IDENTIFIED IN APPENDIX C

A-1W There is one 60-bed general hospital, and seven physicians, within
p107 approximately 19 miles of Wurtsmith AFB. If individual physicians do not desire to participate in CHAMPUS, the individual may file with CHAMPUS for reimbursement on his own. However, any difference between CHAMPUS allowable charges and the physician's charges must be borne by the individual. Medical care in a military hospital is not, and has not been, guaranteed to retired servicemen and their dependents. Chapter 55, Title 10, United States Code, The Statutory Authority For Providing Care In Uniformed Services Medical Facilities, states that care for retired military and their family members is subject to the availability of space, facilities, and the capabilities of the medical and dental staff. Refer to AFERN 4.3.4, pages 66 and 160.

A-2W When the Armed Services Committees of Congress have approved
p108 the disposal of an installation and no known requirement exists in the DOD, the land and facilities located thereon are transferred to General Services Administration for disposal. When the property has been determined to be surplus to the needs of the federal government, a notice is sent to the Governor of the state in which the property is located, to the County Clerk or other appropriate official of the county in which the property is located, and to the Mayor or other appropriate official of the city or town in which the property is located. The notice is also given to any regional and local comprehensive planning agencies. In addition, a notice is posted in the post office which serves the area in which the property is located and in other prominent places, such as the state capital building, county building, courthouse, town hall or city hall. The notice requires that an eligible public agency, desiring to acquire the surplus property under the statutory authorities, inform the GSA regional office which dispatched the notice, in writing, within

20 days following the date of the notice. If no response is received within the specified time, GSA assumes that no public agency desires to acquire the property and proceeds with plans to dispose of the surplus property by public sale.

A-3W The Air Force and the Strategic Air Command have made the decision that it will not detract from the defensive posture of the United States to close Kincheloe AFB and reduce operations at Loring AFB. The decision was based on a thorough examination of our strategic capability which confirmed a strong defense posture could be maintained should Kincheloe AFB be closed and Loring AFB reduced to a forward operating base status. Refer to Chapter IV, Section A, Description of Alternative Actions, page 167.

A-4W Personnel from SAC's Directorate of Combat Operations have provided a classified briefing to two of Senator Griffin's Administrative Assistants concerning the strategic utility of Wurtsmith AFB and Kincheloe AFB to include general strategic capability, should the proposed action be approved.

A-5W The disposal of the excess property is made by General Services Administration in the manner described in Answer 2W.

A-6W A decision to declare Wurtsmith AFB excess to the needs of the federal government has not been made. A decision of this nature would normally be made at some time after the termination of air force activity at Wurtsmith, except for caretaker functions.

A-7W The Federal Property and Administrative Services Act of 1949 provides the statutory means whereby most Federal real property holdings, which Federal agencies find are no longer required for their needs and for the discharge of their responsibilities, are reported to the General Services Administration for: (1) utilization by other executive agencies having a requirement for such property,

or (2) disposed as surplus property, in accordance with authorizations provided in the act and in certain other laws relating to the disposal of surplus real property.

A-8W Once a decision is made, and implemented, to close/reduce a
pl13 base(s) as a result of this study/evaluation, that ends the process. Those bases not selected from the final list of candidates (primary or alternates) are dropped from further consideration. If and when future realignment actions must be considered, another full scale evaluation will be initiated based upon the strategic posture (bomber and tanker) existing at that time. The fact that a particular base was included in this evaluation as an alternate (or primary for that matter) will not, in itself, make it more vulnerable during any future study. Its vulnerability will be based upon how it fits into the selection criteria that is used as part of the evaluation process. Past vulnerability, per se, will not be a part of that criteria. Refer to Chapter IV, Alternatives, page 167 and following.

A-9W The selection criteria listed in Chapter IV of the FEIS outlines
pl14 the rationale used in arriving at the four bases being considered for closure/reduction. Maximum savings are realized by closure or reduction of those installations that support a single B-52/KC-135 mission.

A-10W Kincheloe AFB provides support to 14 units (11 military and 3
pl15 civilian). The units are listed below:

- 753rd Radar Squadron, Sault Ste. Marie, Michigan
- 174th TAC Ftr Sp, Syracuse, New York
- Det 6, 1st CEVG, Bayshore, Michigan
- Phelps Collins Training Site Det, Kincheloe AFB, Michigan
- 676th Radar Sq, Antigo, Wisconsin
- 193rd TEW, Middleton, Pennsylvania
- U.S. Coast Guard/Cheboygan, Michigan

U.S. Coast Guard, Sault Ste. Marie, Michigan

AFROTC/Lake Superior State College, Sault Ste. Marie, Michigan

AFROTC/Sault Ste. Marie High School

Defense Property Disposal Region, Kincheloe AFB, Michigan

Kincheloe Resident Agent (DIS), Kincheloe AFB, Michigan

309th Civil Affairs Group, Inkster, Michigan

U.S. Army Recruiting Station, Sault Ste. Marie, Michigan

The support function required by these stated units would come from another source, possibly a military installation.

A-11W The cost to provide support to off-base locations will increase
p115 slightly as support requirements are transferred to other locations. All three bases being considered for closure currently provide this type of support and the cost for support would be accrued should any of the candidate bases be approved for closure.